

# Professional-Technical Programs

Titles, Codes and Descriptions

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## AGRICULTURAL SCIENCE AND TECHNOLOGY

### PROFESSIONAL-TECHNICAL APPROVED COURSES

#### IBEDS

0101	AG 0110	Introduction to Agricultural Education
0102	AG 0120	Introduction to the Agricultural Industry
0103	AG 0130	Introduction to Agricultural Mechanics
0104	AG 0140	Introduction to the Livestock Industry
0105	AG 0150	Introduction to the Agricultural Plant Industry
0131	AG 0210	Agricultural Welding
0132	AG 0211	Advanced Agricultural Welding
0135	AG 0220	Agricultural Power Technology
0918	AG 0221	Small Gasoline Engines
0136	AG 0222	Agricultural Power Technology/Large Engines
0130	AG 0225	Agricultural Systems/Electricity and Hydraulics
0129	AG 0227	Agricultural Machinery
0127	AG 0230	Agricultural Structures
0128	AG 0240	Agricultural Fabrication
0141	AG 0310	Applied Livestock Management
0142	AG 0320	Applied Crop Management
0151	AG 0330	Landscape Design
0152	AG 0335	Floral Design and Marketing
0153	AG 0340	Applied Greenhouse and Nursery Management
0114	AG 0350	Forestry and Wildlife Management
0144	AG 0410	Personal Skill Development
0146	AG 0460	Agribusiness Management and Marketing
0125	AG 0470	Agricultural Sales
0154	AG 0510	Botany/Plant and Soil Science
0155	AG 0512	Botany/Science of Plant Growth and Development
0156	AG 0514	Botany/Horticulture Plant Science
0157	AG 0516	Botany/Forestry Science
0158	AG 0517	Botany/Advanced Forestry Science
0159	AG 0518	Botany/Range Science
0161	AG 0520	Ecology/Natural Resource Science
0162	AG 0525	Ecology/Environmental Science
0185	AG 0526	Intro to Environmental Science Technology (TI 1901 <sup>1</sup> )
0186	AG 0527	Environmental Sciences Technology Applications (TI 1902)
0187	AG 0528	Advanced Environmental Sciences Technology Applications (TI 1903)
0171	AG 0530	Zoology/Animal Science
0172	AG 0532	Zoology/Science of Animal Nutrition
0173	AG 0534	Zoology/Science of Animal Reproduction
0113	AG 0536	Zoology/Fish and Wildlife Science
0184	AG 0540	Agricultural Biotechnology
0181	AG 0550	Food Science
0182	AG 0560	Aquaculture Science
0183	AG 0570	Equine Science
0126	AG 0660	Agricultural Business and Economics
0197	AG 9800	Occupational and Career Experience
0198	AG 9900	Cooperative Education

### OTHER COURSES AND ASSIGNMENTS

<b>0850</b>	<b>PR 0001</b>	<b>Preparation Period</b>
<i>To be assigned</i>	00 0000	No Class or Activity
<i>To be assigned</i>	AC 0017	All other courses/Activities
<i>To be assigned</i>	AC 0019	Other Professional-Technical Courses

<sup>1</sup> Courses cross-coded to other program areas can be taught by teachers holding either endorsement.

## AGRICULTURAL SCIENCE AND TECHNOLOGY

### Capstone Courses

For Performance Measures and follow-up purposes, a Program Completer is defined as a senior student who, as either a junior or senior, has taken a capstone course.

#### Intro to Agricultural Science and Technology

AG 0110	Introduction to Agricultural Education
AG 0120	Introduction to the Agricultural Industry
AG 0130	Introduction to Agricultural Mechanics
AG 0140	Introduction to the Livestock Industry
AG 0150	Introduction to the Agricultural Plant Industry

#### Agricultural Mechanics

AG 0210	Agricultural Welding
AG 0220	Agricultural Power Technology
AG 0221	Small Gasoline Engines
*AG 0222	Agricultural Power Technology/Large Engines
AG 0225	Agricultural Systems/Electricity and Hydraulics
AG 0227	Agricultural Machinery
AG 0230	Agricultural Structures
*AG 0240	Agricultural Fabrication

#### Applied Agricultural Management

AG 0310	Applied Livestock Management
AG 0320	Applied Crop Management
AG 0330	Landscape Design
AG 0335	Floral Design and Marketing
*AG 0340	Applied Greenhouse and Nursery Management
*AG 0350	Forestry and Wildlife Management

#### Environmental Science Technology

AG 0526	Intro to Environmental Science Technology
*AG 0527	Environmental Sciences Technology Applications
*AG 0528	Adv. Environmental Sciences Technology Applications

#### Agricultural Leadership and Management

AG 0410	Personal Skill Development
*AG 0460	Agribusiness Management and Marketing
AG 0470	Agricultural Sales
AG 9800	Occupational and Career Experience
AG 9900	Cooperative Education

#### Applied Biology

*AG 0510	Botany/Plant and Soil Science
AG 0512	Botany/Science of Plant Growth and Development
*AG 0514	Botany/Horticulture Plant Science
AG 0516	Botany/Forestry Science
*AG 0517	Botany/Advanced Forestry Science
AG 0518	Botany/Range Science
AG 0520	Ecology/Natural Resource Science
AG 0525	Ecology/Environmental Science
*AG 0530	Zoology/Animal Science
AG 0532	Zoology/Science of Animal Nutrition
AG 0534	Zoology/Science of Animal Reproduction
*AG 0536	Zoology/Fish and Wildlife Science
AG 0540	Agricultural Biotechnology
AG 0550	Food Science
AG 0560	Aquaculture Science
AG 0570	Equine Science

#### Consumer Economics

AG 0660	Agricultural Business and Economics
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\*Capstone courses for the sequence option - Capstone courses are those in which the Occupational Competency Attainment will be measured. Capstone courses will vary among programs, but may include any course above the 100 series. The content of capstone courses will be of an advanced nature.

## AGRICULTURAL SCIENCE AND TECHNOLOGY

AG 0110 IBED 0101	INTRODUCTION TO AGRICULTURAL EDUCATION Semester/Trimester	
	A basic introductory course designed to introduce beginning students to Agricultural Education. This course includes agricultural career development, leadership, communications, and personal finance.	
AG 0120 IBED 0102	INTRODUCTION TO THE AGRICULTURAL INDUSTRY Semester/Trimester	
	A basic applied course designed to enhance students' perceptions of agriculture, its applications, and career opportunities.	
AG 0130 IBED 0103	INTRODUCTION TO AGRICULTURAL MECHANICS Semester/Trimester	
	A course designed to familiarize the student with the basic mechanical theory and skills. Students will develop skills in the areas of Carpentry, Electricity, Plumbing, Fencing, Painting, Metal Working, and Welding processes. Emphasis will be placed on safety and proper use of tools and equipment.	
AG 0140 IBED 0104	INTRODUCTION TO THE LIVESTOCK INDUSTRY Semester/Trimester	
	A course that includes principles of evaluation and selection of beef, swine, sheep, horse and dairy animals.	
AG 0150 IBED 0105	INTRODUCTION TO THE AGRICULTURAL PLANT INDUSTRY Semester/Trimester	
	A course designed to examine soil and plant relationships that affect the production of food and fiber. Topics include soils, irrigation, land judging, plants, crop and weed identification, diseases, insects and chemicals.	
AG 0210 IBED 0131	AGRICULTURAL WELDING Semester/Trimester	Prerequisite: Intro to Agricultural Mechanics
	A course designed to develop skills in Arc and Oxy-Acetylene welding and the processes that deal with the joining of metal for the agricultural industry.	
AG 0211 IBED 0132	ADVANCED AGRICULTURAL WELDING Semester/Trimester	Prerequisite: Agricultural Welding
	A course designed to reinforce foundational process skills in Arc and Oxy-Acetylene welding as well as implement advanced fabrication and manufacturing technology practices.	
AG 0220 IBED 0135	AGRICULTURAL POWER TECHNOLOGY Semester/Trimester Intro to Agricultural Mechanics	Prerequisite:
	A course designed to develop skills in selection, operation and maintenance of small air-cooled engines, multi-cylinder engines, hydraulics, electric motors, and agricultural machinery and tractors.	
AG 0221 IBED 0918	SMALL GASOLINE ENGINES Semester/Trimester	Prerequisite: Intro to Agricultural Mechanics
	A course designed to develop skills in selection, operation, and maintenance of small air-cooled engines.	

AG 0222 IBED 0136	<p>AGRICULTURAL POWER TECHNOLOGY/LARGE ENGINES</p> <p>Semester/Trimester</p> <p>Prerequisite: Intro to Agricultural Mechanics</p> <p>A course designed to develop skills in selection, operation and maintenance of multi-cylinder engines, hydraulics, electric motors, and agricultural machinery and tractors.</p>
AG 0225 IBED 0130	<p>AGRICULTURAL SYSTEMS/ELECTRICITY AND HYDRAULIC</p> <p>Semester/Trimester</p> <p>Prerequisite: Intro to Agricultural Mechanics</p> <p>A course designed to develop skills in operation of tools and equipment, wiring, controls, electric motors, and hydraulics.</p>
AG 0227 IBED 0129	<p>AGRICULTURAL MACHINERY</p> <p>Semester/Trimester</p> <p>Prerequisite: Intro to Agricultural Mechanics</p> <p>A course designed to develop skills in selection, operation, maintenance and management of agricultural machinery.</p>
AG 0230 IBED 0127	<p>AGRICULTURAL STRUCTURES</p> <p>Semester/Trimester</p> <p>Prerequisite: Intro to Agricultural Mechanics</p> <p>A course preparing students to maintain, evaluate, design, and build agriculture structures using approved construction techniques.</p>
AG 0240 IBED 0128	<p>AGRICULTURAL FABRICATION</p> <p>Semester/Trimester</p> <p>Prerequisite: Intro to Agricultural Mechanics/ Agricultural Welding</p> <p>A course to develop skills in metal equipment assembly and joining processes.</p>
AG 0310 IBED 0141	<p>APPLIED LIVESTOCK MANAGEMENT</p> <p>Semester/Trimester</p> <p>Prerequisite: Intro to Agricultural Education or Intro to Agricultural Industry or Intro to Livestock Industry</p> <p>A course that includes principles of animal production and management. Topics include health, evaluation, selection, feeding, and management.</p>
AG 0320 IBED 0142	<p>APPLIED CROP MANAGEMENT</p> <p>Semester/Trimester</p> <p>A course that prepares students to operate enterprises concerned with the production of various field crops.</p>
AG 0330 IBED 0151	<p>LANDSCAPE DESIGN</p> <p>Semester/Trimester</p> <p>A course that prepares students to design, construct, and maintain planted areas and devices for the beautification of home grounds and other areas of human habitation and recreation.</p>
AG 0335 IBED 0152	<p>FLORAL DESIGN AND MARKETING</p> <p>Semester/Trimester</p> <p>A course designed to develop skills in floriculture and the techniques used to develop and complete a variety of retail items normally sold in a retail florist business. The skills learned are necessary to gain and maintain employment in the retail florist industry.</p>

AG 0340 IBED 0153	APPLIED GREENHOUSE AND NURSERY MANAGEMENT Semester/Trimester	A course designed to prepare students in greenhouse and nursery operation and management.
AG 0350 IBED 0114	FORESTRY AND WILDLIFE MANAGEMENT Semester/Trimester	A course designed to examine the importance of forestry, wildlife, and outdoor recreation with emphasis on efficient use of natural resources.
AG 0410 IBED 0144	PERSONAL SKILL DEVELOPMENT Semester/Trimester	A comprehensive course in developing agricultural leadership, citizenship, and cooperation. It includes topics in personal development, employee/employer relations, and group and individual interpersonal communications skills.
AG 0460 IBED 0146	AGRIBUSINESS MANAGEMENT AND MARKETING Semester/Trimester	A course designed to introduce the student to agribusiness management in the free enterprise system. It includes a study of economic principles, budgeting, record keeping, finance, risk management, business law, marketing and careers in agribusiness.
AG 0470 IBED 0125	AGRICULTURAL SALES Semester/Trimester	A course designed to develop skills in preparing, developing, and practicing agribusiness sales competencies. The skills learned are necessary to gain and maintain employment in the wholesale/retail agriculture sales field.
AG 0510 IBED 0154	BOTANY/PLANT AND SOIL SCIENCE Semester/Trimester	A course designed to examine soil and plant relationships that affect the production of food and fiber. Topics include soils, plants, plant ID, and plant pests.
AG 0512 IBED 0155	BOTANY/SCIENCE OF PLANT GROWTH AND DEVELOPMENT Semester/Trimester	A course designed to examine the importance of plant cell structure, functions of cells, plant processes, nonvascular plants, vascular plants, roots, stems, leaves, flowers and reproduction of plants.
AG 0514 IBED 0156	BOTANY/HORTICULTURE PLANT SCIENCE Semester/Trimester	A course that prepares students to produce greenhouse/nursery plants and to maintain plant growth and propagation structures.
AG 0516 IBED 0157	BOTANY/FORESTRY SCIENCE Semester/Trimester	A course designed to introduce students to the biological, environmental and ecological concepts encountered in a temporal forest environment.

AG 0517 IBED 0158	BOTANY/ADVANCED FORESTRY SCIENCE Semester/Trimester	This course is a companion course to AG 0516 Botany/Forestry Science. It provides an advanced level of instruction in the biological, environmental and ecological concepts that are encountered in a temporal forest environment. AG 0516 should be taken as a prerequisite course to provide fundamental instruction in the forestry sequence.
AG 0518 IBED 0159	BOTANY/RANGE SCIENCE Semester/Trimester	A course designed to acquaint students with principles of conservation, natural resources, ecology, and range science.
AG 0520 IBED 0161	ECOLOGY/NATURAL RESOURCE SCIENCE Semester/Trimester	A course designed to teach the concepts of conservation, natural resources, ecology, and fish/wildlife science.
AG 0525 IBED 0162	ECOLOGY/ENVIRONMENTAL SCIENCE Semester/Trimester	A course that provides science instruction and practical experiences in environmental science including agricultural/industrial chemical issues, habitat preservation/restoration, remediation of damaged resources, conservation practices and current environmental issues.
AG 0526 (TI 1901) IBED 0185	INTRO TO ENVIRONMENTAL SCIENCE TECHNOLOGY Semester/Trimester	A course designed to provide students with team work, critical thinking, problem solving, diagnostics and creative designing to industry standards. Students will be given a variety of skills development situations in which they will be required to solve problems relating to water, ground and air contaminations or abnormalities. A strong science background is suggested prior to enrollment. Basic instrument and tool use will be provided, along with computer/instrumentation applications and applied physical and chemical science laboratory exercises.
AG 0527 (TI 1902) IBED 0186	ENVIRONMENTAL SCIENCES TECHNOLOGY APPLICATIONS Two Semesters/Three Trimesters	This course is a full year in length and introduces students to the multitude of scenarios of hazardous material conditions which exist in the nation's waterways, soil, and air. Air and water pollution examples will be studied and models of controlling pollution or contamination will be examined.
AG 0528 (TI 1903) IBED 0187	ADVANCED ENVIRONMENTAL SCIENCES APPLICATIONS/INTERNSHIP Multiple Block/Full Year	Students will be involved in examining and studying existing pollution and contamination solutions in area industries. Single family, community, and industry applications of models to prevent contamination and pollution of soil, water, and air will be presented to students. On-site industry and field experiences will be an integral component of this course. This course should be offered as a multiple period block for a full year.
AG 0530 IBED 0171	ZOOLOGY/ANIMAL SCIENCE Semester/Trimester	A course designed to develop knowledge and skills pertaining to nutrition, reproduction, diseases, breeding, genetics, anatomy, and physiology in livestock.



AG 0532 IBED 0172	ZOOLOGY/SCIENCE OF ANIMAL NUTRITION Semester/Trimester	A course of study designed to provide learning experiences for students in the areas of animal nutrition and physiology.
AG 0534 IBED 0173	ZOOLOGY/SCIENCE OF ANIMAL REPRODUCTION Semester/Trimester	A course of study which provides learning experiences in the subject matter relating to anatomy and physiology of animal reproduction.
AG 0536 IBED 0113	ZOOLOGY/FISH AND WILDLIFE SCIENCE Semester/Trimester	A course designed to examine the importance of fish and wildlife science, outdoor recreation and natural resources.
AG 0540 IBED 0184	AGRICULTURAL BIOTECHNOLOGY Semester/Trimester	A course designed to explore a variety of technology applications that are used to modify living organisms in the areas of plant and animal science, plant and animal health, environmental science, and food science.
AG 0550 IBED 0181	FOOD SCIENCE Semester/Trimester	An applied science course in the science of food production, processing, transporting, storage, toxicology and quality control. Students apply the scientific method of discovery as they study the biological and chemical basis of food preparation, processing and preservation. Students develop writing and critical thinking skills through data collection, laboratory procedures, science-based experimentation, and written lab reports. This course focuses primarily on the food processing industry and may be used as a companion course to the Family and Consumer Sciences course in Food Science.
AG 0560 IBED 0182	AQUACULTURE SCIENCE Semester/Trimester	A course that provides science instruction and practical applications of science principles in the context of fish production. It focuses on such issues as water quality, nutrition, health, and aquatic environments and the plants and animals that live in water. Opportunities are provided for laboratory experiences related to aquaculture.
AG 0570 IBED 0183	EQUINE SCIENCE Semester/Trimester	A course of instruction designed to provide science and practical management instruction in the care of horses. The applied science curriculum component has a focus on physiology, anatomy, nutrition, genetics, health and reproduction.
AG 0660 IBED 0126	AGRICULTURAL BUSINESS AND ECONOMICS Semester/Trimester	A course designed to introduce the student to agribusiness management in the free enterprise system. It includes a study of economic principles, budgeting, record keeping, finance, decision making, risk management, business law, marketing and careers in agribusiness.

AG 9800  
IBED 0197

OCCUPATIONAL AND CAREER EXPERIENCE  
Semester/Trimester

A community based work experience activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objectives of the student. The experiences must be supervised and monitored by the teacher. **(Note: This course must be approved on an individual program basis by the State Division.)**

AG 9900  
IBED 0198

COOPERATIVE EDUCATION  
Semester/Trimester

Community based instruction organized and planned to provide specialized skills unique to an occupation or industry. Students are placed in businesses which provide paid on-the-job experience which is related to the student's primary area of study. The experience must be supervised by the teacher and students must have a training plan.

## BUSINESS AND OFFICE TECHNOLOGY

### PROFESSIONAL-TECHNICAL APPROVED COURSES

Grades 9 -12

0221	BE 0100	Introduction to Business Professions (ME 0100)
0213	BE 0110	Keyboarding Applications (2nd semester/trimester class; see course description)
0214	BE 0130	Keyboarding Production I
0215	BE 0140	Keyboarding Production II
0223	BE 0150	Business Management/Technology (ME 0150)
0234	BE 0151	Business Law/Ethics Applications
0218	BE 0152	Computerized Recordkeeping Applications
0225	BE 0153	Banking & Finance/Money Management/Stock Market Strategies
1854	BE 0200	Marketing Economics (Applied Economics) (ME 0200)
3051	BE 0210	Business Data Processing I-Basic
3052	BE 0220	Business Data Processing I-Advanced
3056	BE 0250	Computer Programming I-Other Language
3057	BE 0260	Computer Programming II-Other Language
3077	BE 0261	AP Computer Science
3020	BE 0270	Introduction to Information/Communications Technology
3063	BE 0271	Networking Applications
3087	BE 0272	Telecom Applications
3088	BE 0273	Video/Graphic Applications
3095	BE 0274	Technology Assistant Internship
3076	BE 0276	Advanced Computer Design and Repair
3046	BE 0299	Introduction to Visual Languages/Computer Programming
1855	BE 0300	Principles of Marketing (ME 0300)
3047	BE 0310	Business Computer Applications I
3031	BE 0311	Intro to Word Processing
3034	BE 0312	Intro to Spread Sheets
3037	BE 0313	Intro to Databases
3041	BE 0314	Intro to Desk Top Publishing
3044	BE 0315	Intro to Integrated Applications-Works I
3084	BE 0316	Intro to Multi-Media Communications I
3081	BE 0317	Intro to Computer Graphic/Arts Communications I
3071	BE 0318	Intro to Internet Applications
3048	BE 0320	Business Computer Applications II
3032	BE 0321	Word Processing II
3035	BE 0322	Spreadsheets II
3038	BE 0323	Databases II
3042	BE 0324	Desk Top Publishing II
3045	BE 0325	Integrated Applications-Works II
3085	BE 0326	Multi-Media Communications II
3082	BE 0327	Computer Graphic/Arts Communications II
1868	BE 0328	eCommerce/Business to Business (ME 0328)
0210	BE 0330	Business Machines
1856	BE 0340	Intro to International Business/Marketing (ME 0340)
1857	BE 0341	International Business/Marketing I (ME 0341)
1858	BE 0342	International Business/Marketing II (ME 0342)
0211	BE 0410	Accounting I
0212	BE 0420	Accounting II
0217	BE 0421	Computerized Accounting
0224	BE 0600	Business Ownership/Entrepreneurship (ME 0600)
0203	BE 0610	Business Technology/Office Procedures
0297	BE 9800	Occupational and Career Experience
0298	BE 9900	Cooperative Education

**ACADEMY OF FINANCE**(Codes for approved National Academy of Finance programs only)

0230	BT 0100	Introduction to Financial Services I (MT 0100)
0222	BT 0101	Strategies for Success (MT 0101)
0226	BT 0102	Banking and Credit (MT 0102)
0228	BT 0103	Financial Planning/Financial Operations (MT 0103)
0229	BT 0104	International Finance (MT 0104)
0227	BT 0105	Economics and the World of Finance (MT 0105)
0231	BT 0106	Securities (MT 0106)
0232	BT 0107	Insurance (MT 0107)

**OTHER COURSES AND ASSIGNMENTS**

<b>0850</b>	<b>PR 0001</b>	<b>Preparation Period</b>
<i>To be assigned</i>	00 0000	No Class or Activity
<i>To be assigned</i>	AC 0017	All other courses/Activities
<i>To be assigned</i>	AC 0019	Other Professional-Technical Courses

## BUSINESS & OFFICE TECHNOLOGY

### Capstone Courses

For Performance Measures and follow-up purposes, a Program Completer is defined as a **senior** student who, as either a junior or senior, has taken a capstone course.

Possible business class combinations are numerous and vary across the state. The following sequences are provided to help you identify completers. **Please note: BE 0022 Introduction to Keyboarding or the equivalent (one semester) is a prerequisite to all options.**

#### Keyboarding/Word processing

BE 0110 Keyboarding Applications  
 BE 0130 Keyboarding Production I  
 BE 0311 Intro. to Word Processing  
 \*BE 0150 Business Management/Technology  
 \*BE 0610 Business Technology/Procedures

#### Accounting

BE 0110 Keyboarding Applications  
 BE 0152 Computer Recordkeeping Apps.  
 BE 0410 Accounting I  
 \*BE 0420 Accounting II  
 \*BE 0421 Computerized Accounting

#### Desk Top/Graphic Communication

BE 0314 Intro to Desk Top Publishing  
 BE 0324 Desk Top Publishing  
 BE 0327 Graphic/Arts Communication  
 \*BE 0150 Business Management/Technology  
 \*BE 0318 Intro to Internet Applications

#### Multi-Media

BE 0110 Intro. to Desk Top Publishing  
 BE 0327 Graphic/Arts Communication  
 BE 0318 Internet HTML  
 \*BE 0326 Multi-Media Communications II

#### Basic Computer Applications

BE 0110 Keyboarding Applications  
 BE 0310 Business Computer Applications I  
 BE 0320 Business Computer Applications II  
 \*BE 0150 Business Management/Technology  
 \*BE 0610 Business Technology/Procedures

#### Business Data Processing

BE 0210 Business Data Processing I  
 BE 0220 Business Data Processing II  
 BE 0250 Computer Programming I-Other Language  
 \*BE 0260 Computer Programming II-Other Lang.  
 \*BE 0261 AP Computer Science

#### Basic Business

BE 0110 Keyboarding Applications  
 BE 0100 Intro. to Business Professions  
 BE 0310 Business Computer App. I  
 \*BE 0150 Business Management/Technology

#### Integrated Business Applications

BE 0110 Keyboarding Applications  
 BE 0315 Intro to Integrated Apps.-Works I  
 BE 0325 Integrated Applications-Works II  
 \*BE 0150 Business Management/Technology  
 \*BE 0610 Business Technology/Procedures

#### Business Entrepreneurship

BE 0110 Keyboarding Applications  
 BE 0100 Intro. to Business Professions  
 BE 0300 Principles of Marketing  
 \*BE 0600 Bus. Ownership/Entrepreneurship

#### International Business

BE 0110 Keyboarding Applications  
 BE 0340 Intro. to International Business  
 BE 0341 International Business I  
 \*BE 0342 International Business II

#### Technology Support

BE 0270 Intro/Information/Communications Tech  
 BE 0271 Networking Applications  
 BE 0273 Video/Graphic Applications  
 \*BE 0274 Technology Assistant Internship

\* Capstone courses for the sequence option - Capstone courses are those in which the Occupational Competency Attainment will be measured. The content of capstone courses will be of an advanced nature. A capstone course must be provided by the Business & Office Technology Program for continued approval. Please note that this is only a sample of possible sequences. All of the sequences require a student to successfully complete at least three semesters with a fourth semester required for many. Students should be receiving basic content instruction and achieving keyboarding skills equivalent to 50 WPM.

## BUSINESS & OFFICE TECHNOLOGY

BE 0022  
IBED 0204

KEYBOARDING/KEYBOARDING INTRODUCTION (1st Semester/Trimester)\*  
Semester/Trimester

Keyboarding/Keyboarding Introduction is the first semester of formal keyboarding instruction. Students learn home-row positioning on the computer keyboard. Proper technique, including hand position, key-strokes, touch-control and posture are emphasized. Students are introduced to basic formatting of business documents as well as documents for personal use. While technique is primary, speed and accuracy skill development is integral to the course.

**\*NOTE: This class is a prerequisite to most other business courses. It is recommended that one semester of formal keyboarding, taught by a qualified instructor, be provided to all students prior to the 9th grade.**

BE 0061  
(FC 0040, TE 0061)  
IBED 0521

TECHNOLOGY, LIFE and CAREERS

This introductory offering allows students to explore a wide variety of occupations in all six of Idaho's Career Pathways. The content includes the basic knowledge, skills and attitudes needed for success in all occupations. This experience will use technology to explore career interests, the world of work, human relations skills, health and safety issues, technology applications and process skills. Students will deal with situations and issues relating to self, family, workplace, community and the world. It is recommended that students have an opportunity to observe or volunteer in a variety of work settings. Students who complete this experience will be better prepared to develop a four-year parent-approved student learning plan.

BE 0100 (ME 0100)  
IBED 0221

INTRODUCTION TO BUSINESS PROFESSIONS  
Semester/Trimester

Prerequisite: None

Introduction to Business Professions develops career-sustaining skills for business occupations. Career opportunities in business, communications skills, human relations, employment applications, general employability skills, and core business skills are emphasized. Basic understandings of business principles and practices are developed.

BE 0110  
IBED 0213

KEYBOARDING APPLICATIONS  
Semester/Trimester  
(9th grade status or higher required for  
Professional-Technical reimbursement)

Prerequisite: Keyboarding (Or teacher approval)

Keyboarding Applications is a one-semester/trimester course designed to apply keyboarding skills in formatting and producing letters, tables, reports, and outlines on microcomputers. Speed and accuracy are facilitated through the use of tutorial software. Original composition at the keyboard using unarranged or rough draft materials are integrated throughout the semester. Students are introduced to word processing, spreadsheets, databases and other business software. The software is used to complete assignments.

BE 0130/0140  
IBED 0214/0215

KEYBOARDING PRODUCTION I & II  
One or Two Semesters/Trimesters

Prerequisite: Keyboarding or  
Keyboarding Applications

Keyboarding Production I is a one-semester/trimester course designed to review and further develop skills acquired in keyboarding applications with emphasis on production and quality of output. Original composition at the keyboard and unarranged/rough draft materials are integrated throughout the semester.

Keyboarding Production II is a one-semester/trimester course designed for use of microcomputers to introduce word processing concepts, procedures, and applications. Equipment operation and skill development are integrated throughout the course.

BE 0150 (ME 0150) BUSINESS MANAGEMENT/TECHNOLOGY  
IBED 0223 Semester/Trimester/Year

Prerequisite: Keyboarding

Business Technology is a one-semester/trimester or year-long course which provides students an introduction to a variety of essential business and marketing competencies. The course includes units of instruction in the following areas: accounting principles, salesmanship, marketing/entrepreneurship, general business principles, business law, human relations skills, public speaking, business communications, keyboarding skill development, computer applications, career awareness, job seeking skills. **NOTE: This class can serve as a "Capstone" class.**

BE 0151  
IBED 0234 BUSINESS LAW/ETHICS APPLICATIONS  
Semester/Trimester

Prerequisite: Keyboarding

Business Law/Ethics Applications is a one-semester/trimester course designed to provide students with an overview of civil and criminal law. The course will include law as it relates to business principles and practices; such as, business ethics, copyright laws, and computer software piracy. Students will use microcomputers to prepare answers to assignments, reports, briefs, and do casework. This is an expanded segment of the Business Technology Curriculum.

BE 0152  
IBED 0218 COMPUTERIZED RECORDKEEPING APPLICATIONS  
Semester/Trimester

Prerequisite: Keyboarding

Computerized Recordkeeping Applications is a one-semester/trimester course designed to provide students with recordkeeping skills using manual and computerized systems. Students will acquire touch-control skills using the ten-key pad or using a ten-key calculator. Commercial software or spread sheet software systems will be used. This is an expanded segment of the Business Technology Curriculum.

BE 0153  
IBED 0225 BANKING & FINANCE/MONEY MANAGEMENT/STOCK MARKET STRATEGIES  
Semester/Trimester

Prerequisite: Keyboarding

Banking & Finance/Money Management/Stock Market Strategies is a one semester/trimester course designed to provide interested students an in-depth exposure to money management, personal finance, investments and stock market strategies. As much as possible, students should use microcomputers to complete assignments, chart statistics, prepare reports and analyze data. This is an expanded segment of the Business Technology Curriculum.

BE 0200 (ME 0200) MARKETING ECONOMICS  
IBED 1854 (Applied Economics on microcomputers. Meets graduation requirements.)  
Semester/Trimester

Prerequisite: Keyboarding

Marketing Economics is a one-semester course that applies decision making in personal and societal affairs in order to satisfy needs and wants with limited resources that have alternative uses. Theories of the economic free enterprise system at work in our society are studied. Microcomputers are used to complete assignments, take notes, prepare reports and analyze data. **Refer to Secondary School Courses of Study.**

BE 0210/0220 IBED 3051/3052	BUSINESS DATA PROCESSING I & II--BASIC/ADVANCED Semester/Trimester	Prerequisite: Keyboarding
	Business Data Processing I is a one-semester/trimester course that introduces data processing procedures and careers. Emphasis is placed on electronic data processing systems. A programming language, such as BASIC, is introduced. Business Data Processing II is a one-semester/trimester course that emphasizes advanced structured BASIC programming competencies.	
BE 0250/0260 IBED 3056/3057	COMPUTER PROGRAMMING I & II – OTHER LANGUAGE Semester/Trimester	Prerequisite: DP II or DP III
	Computer Programming I is a one-semester/trimester course which emphasizes the use of programming skills to manage information. Systems design, input, storage, output, editing, and printing of data in useable form are taught.	
	Computer Programming II is a one-semester/trimester course which uses advanced data processing applications in teaching the management of information.	
BE 0261 IBED 3077	AP COMPUTER SCIENCE One Year	
	Advanced Placement Computer Science is a full-year course which is equivalent to a first semester college course. The major emphasis is on programming methodology, algorithm development, and data structures. The course is taught in a high-level language widely used in business and scientific applications. This language requires careful planning prior to programming and great attention to detail while writing program code. Treatment of computer systems, other computer languages, and the social implications of computing are a part of the course.	
BE 0270 IBED 3020	INTRODUCTION TO INFORMATION/COMMUNICATIONS TECHNOLOGY One Year	
	This course provides the basic understanding of a computer networking system and the operations and maintenance procedures of the related components. It is understood that students enrolling in this course should have basic computer literacy. The course is the foundation for the Idaho Networking Technology program and is a prerequisite course for advanced level instruction. The course is typically a semester in length.	
BE 0271 IBED 3063	NETWORKING APPLICATIONS One Semester/Trimester	Prerequisite: Intro to Information and Communications Technology
	This course provides students the opportunity to become familiar with the hardware and software knowledge required to function as a network technician. It is a basic course leading to the advanced levels of certification. Students will learn the skills necessary to prepare them to take initial certification tests. This is either a year long or semester length course. Alternative course work that would replace this course is A+. It is suggested that TI 0551 be a prerequisite to advanced level instruction.	
BE 0272 IBED 3087	TELECOM APPLICATIONS One Semester/Trimester	Prerequisite: Intro to Information and Communications Technology
	A course which provides the student with a basic understanding of telecommunications and the equipment necessary for distant communication networks. Students will explore various methods of communications using microwave, satellite, closed circuit, and other applications. Community and industrial sites will serve as training locations in addition to the district applications. Video setup, sound, camera, and monitor needs, text and data requirements, and educational applications will be studied. Students will analyze and design systems and install and maintain equipment in the district and in community or industry sites.	



BE 0273  
IBED 3088

VIDEO/GRAPHICS APPLICATIONS  
One Semester/Trimester

Prerequisite: Intro to Information and  
Communications Technology

A course providing students with the basic understanding of video and graphic technology to include video taping, sound and graphic design, recording and production requirements, and digital applications. Students will install, maintain, set up and operate various video, sound and computerized equipment as found in a production studio. Graphics development for design, layout, and production of video, television, telecommunication, or printing applications will be studied in district and community sites.

BE 0274  
IBED 3095

TECHNOLOGY ASSISTANT INTERNSHIP  
One Year

Prerequisite: Intro to Information and  
Communications Technology

A course requiring students to practice skills learned in the initial levels of the program by performing the duties of an assistant to the system operator of a computer network or technology center. Duties will be performed in conjunction with adults either in the school district or on a school-to-work assignment in the community. Skills to be learned and reinforced would include installing, maintaining and troubleshooting equipment. In addition, the student would be responsible for providing training and in-service on appropriate equipment to all school personnel, develop communication linkages, and serve as system technician.

BE 0276  
IBED 3076

ADVANCED COMPUTER DESIGN AND REPAIR

This course develops student skills in computer design, assembly, maintenance, diagnostics, upgrade and repair. Students will also learn non-technical workplace skills including inventory tracking, work orders, scheduling, invoices, component research and acquisition, and related business procedures. Some aspects of this course will be patterned after the Micron assembly line training experienced by the district's Micron interns.

BE 0299  
IBED 3046

INTRODUCTION TO VISUAL LANGUAGES/COMPUTER PROGRAMMING

This course introduces students to computer science, programming concepts, and programming in the visual environment (Win 95). Students will learn how to design, enter, compile, run and debug programs using Visual Basic, Visual C, and JAVA. Students will gain an understanding of how to break up large programming tasks into small, solvable parts (Objects) to create effective working programs. Programming style and algorithm development will be emphasized. An introduction to logic and computer history will be integrated into the class. Effective communication skills will be stressed, both written and visual. Students should have some knowledge of Windows 95 entering the class.

BE 0300 (ME 0300)  
IBED 1855

PRINCIPLES OF MARKETING  
Semester/Trimester

Prerequisite: None

Principles of Marketing is a one-semester/trimester course which focuses on marketing functions and foundations and their relationship to the competitive enterprise system which controls marketing behavior. Marketing theory is presented and applied to business problems, practices, the business environment and management systems. (Instructor must have marketing credits/coursework. Must be taught by a Marketing endorsed instructor to be a part of the Marketing Program sequence.)

BE 0310  
IBED 3047  
BE 0320  
IBED 3048

BUSINESS COMPUTER APPLICATIONS I

BUSINESS COMPUTER APPLICATIONS II

Semester/Trimester/Year

Prerequisite: Keyboarding/Keyboarding Applications

Business Computer Applications I is a one-semester/trimester courses designed to acquaint students with basic principles and terminologies associated with data "information" processing. The course includes an introduction to operating systems, word processing, spread sheet, database and desktop publishing software. Stand-alone or integrated packages may be used to process business related applications. Business Computer Applications II is more in-depth covering complex software applications. Keyboarding speed and accuracy are part of required competencies.

BE 0311 IBED 3031 BE 0321 IBED 3032	INTRODUCTION TO WORD PROCESSING  WORD PROCESSING Semester/Trimester/Year	Prerequisite: Keyboarding/Keyboarding Applications
	Introduction to Word Processing is a one-semester/trimester course designed to acquaint students with basic principles, terminologies and skills associated with using word processing software for performing personal and business related tasks. The second semester/trimester of Word Processing covers complex business applications and concepts. Keyboarding speed and accuracy are part of required competencies.	
BE 0312/0313 IBED 3034/3037 BE 0322/0323 IBED 3035/3038	INTRODUCTION TO SPREADSHEETS/INTRO TO DATA BASES  SPREADSHEETS II/DATA BASES II Semester/Trimester/Year	Prerequisite: Keyboarding/Keyboarding Applications
	One-semester/trimester courses covering spreadsheet and/or database software functions and applications using personal and business related tasks. Keyboarding speed and accuracy are part of required competencies.	
BE 0314 IBED 3041 BE 0324 IBED 3042	INTRODUCTION TO DESK TOP PUBLISHING  DESK TOP PUBLISHING II Semester/Trimester/Year	Prerequisite: Keyboarding/Keyboarding Application
	One-semester/trimester courses covering desk top publishing software use. The course includes integration of text and graphics following acceptable layout and design principles using desk top software and/or desk top features of word processing software. Student generated graphics as well as templated graphics will be used to create documents for personal use and business related tasks. Advanced applications are covered second semester/trimester. Speed, accuracy and proofreading are emphasized.	
BE 0315 IBED 3044 BE 0325 IBED 3045	INTRODUCTION TO INTEGRATED APPLICATIONS-WORKS I  INTEGRATED APPLICATIONS-WORKS II Semester/Trimester/Year	Prerequisite: Keyboarding/Keyboarding Applications
	Courses use integrated applications such as Word, WordPerfect or Works. The multiple features of the software will be taught. Advanced applications are covered during second semester/ trimester. Keyboarding speed and accuracy are part of required competencies.	
BE 0316 IBED 3084 BE 0326 IBED 3085	INTRODUCTION TO MULTI-MEDIA COMMUNICATIONS I  MULTI-MEDIA COMMUNICATIONS II Semester/Trimester/Year	Prerequisite: Keyboarding
	Using multimedia tools and software to create and combine text, graphics, audio and video with links and tools that let the user navigate, interact, create, and communicate.	
BE 0317 IBED 3081 BE 0327 IBED 3082	INTRODUCTION TO COMPUTER GRAPHIC/ARTS COMMUNICATIONS I  COMPUTER GRAPHIC/ARTS COMMUNICATIONS II Semester/Trimester/Year	Prerequisite: Keyboarding
	An Instructional program to prepare individuals to design and execute layouts and illustrations using appropriate graphic/arts communications principles and tools. This course is similar to Desk Top Publishing, but emphasis is on preparing documents to print-industry standards.	
BE 0318 IBED 3071 BE 0328 (ME 0328) IBED 1868	INTRODUCTION TO INTERNET APPLICATIONS  eCOMMERCE/BUSINESS TO BUSINESS Semester/Trimester/Year	Prerequisite: Keyboarding

Courses covering the language of the Web to create and publish Web pages, and using the Internet for research, decision making, and communication purposes.

BE 0330  
IBED 0210

BUSINESS MACHINES  
Semester/Trimester

Prerequisite: None  
(Keyboarding Recommended)

Business Machines is a one-semester/trimester course with emphasis on skill development of touch-control operation of the 10-key electronic calculator and/or the numeric keypad on computers. The course may also include, but is not limited to, operation of other business machines such as photocopiers, fax machines, transcription equipment. Methods for solving basic personal and business problems are practiced while speed and accuracy are developed.

BE 0340 (ME 0340)  
IBED 1856

INTRODUCTION TO INTERNATIONAL BUSINESS/MARKETING  
Semester/Trimester

Prerequisite: Keyboarding/Intro to Bus. Professions

This course is designed for students who want to learn about important aspects of international business in a "hands-on" environment. The student will cover a variety of international business topics: exporting and importing basics, international economics and finance, international marketing and transportation, laws and regulations, communications entrepreneurship, trade documentation and employability skills.

BE 0341/0342  
IBED 1857/1858

INTERNATIONAL BUSINESS/MARKETING I & II  
(ME 0341/0342) Semester/Trimester/Year

Prerequisite: Intro to International Business  
Or, Instructor Permission

The course allows students to discover the global world of business while learning about management styles, business principles, problems and practices, money and banking, organizations, foreign culture, credit and investing, and other factors influencing world trade. The second semester class covers areas related to our economy as well as other countries' economic and trade systems, proper procedures for dealing with international business customers, and valuable aspects of becoming a part of this changing way of doing business.

BE 0410/0420  
IBED 0211/0212  
BE 0421  
IBED 0217

ACCOUNTING I & II

COMPUTERIZED ACCOUNTING  
Year/Two Year

Prerequisite: None  
(Keyboarding recommended)

Accounting I is a two-semester/trimester length course which emphasizes accounting principles as they relate to the basic understanding and skills required in keeping manual and computerized financial records for a business. Emphasis is on providing basic skills for the accounting profession and/or preparation for further study in accounting. Accounting II reinforces and expands the basic principles and procedures learned in Accounting I.

BE 0600 (ME 0600)  
IBED 0224

BUSINESS OWNERSHIP/ENTREPRENEURSHIP  
Semester/Trimester

Prerequisite: Marketing Economics or Bus. Tech. I

Business Ownership/Entrepreneurship is a one-semester/trimester course that expands on the concepts learned in Marketing Economics or Business Technology I. The course provides knowledge, skills, and understanding related to the ownership and management of a business. Simulations and hands-on applications are used. Focus is on the development of a viable business plan related to the student's area of entrepreneurial interest. (Must be taught by a Marketing endorsed instructor to be a part of the Marketing Program sequence.)

BE 0610  
IBED 0203

BUSINESS TECHNOLOGY/OFFICE PROCEDURES  
Semester/Trimester/Year

Prerequisite: Keyboarding, Plus One Semester  
of a Course using Advanced Keyboarding Skills

Office Procedures is designed to provide students with the procedures and skills necessary for the operation of a modern business office. The course includes integration of concepts into realistic simulations and incorporation of computers as they relate to the typical tasks in a modern office. Students study emerging technologies and concepts that will allow them to function effectively in a

high-tech environment.

BE 9800  
IBED 0297

OCCUPATIONAL AND CAREER EXPERIENCE  
Semester/Trimester

Prerequisite: Keyboarding and  
One Other Business Class

This course is a community based work-experience activity organized and planned to develop advanced skills necessary to gain and maintain employment. This class may encompass a broad range of paid/unpaid work experiences related to the career objective of the student. The experiences must be supervised and monitored by the teacher. **(Note: This course must be approved on an individual program basis by the State Division.)**

BE 9900  
IBED 0298

COOPERATIVE EDUCATION  
Semester/Trimester/Year

Prerequisite: Concurrent Enrollment in an  
Advanced Business Course

Cooperative Education is the coordinated work experience segment of any of the advanced business courses listed above. Students are placed in businesses which provide paid on-the-job experience which is related to the student's primary area of study.

### ACADEMY OF FINANCE

(Codes for approved National Academy of Finance programs only)

BT 0100 (MT 0100) INTRODUCTION TO FINANCIAL SERVICES I & II  
IBED 0230 One or Two Semesters/Trimesters

This course can be offered either as a one or two-semester course to be given in either the ninth or tenth grade as a means of introducing students to the various sectors of the financial services industry. The objective of this course is to help students learn about both the nature of the careers found in a particular sector and the scope of the work that comprises businesses such as insurance, real estate, public finance, accounting, and the securities industry.

BT 0101 (MT 0101) STRATEGIES FOR SUCCESS  
IBED 0222 Semester/Trimester

A course of study which helps to orient students to the world of work and school. Ideally, this course is offered in the ninth and tenth grades as it addresses the needs of students to develop good work and study habits, helps students to prepare portfolios, learn about school resources, develop career plans, start preparing for college and develop solid interpersonal skills, with an emphasis on communication and building self-esteem.

BT 0102 (MT 0102) BANKING AND CREDIT  
IBED 0226 Semester/Trimester

A course presenting a survey of the principles and practices of banking and credit in the U.S. Students learn about the major functions of banks and other depository institutions, their in-house operations and procedures, central banking through the Federal Reserve System and modern trends in the banking industry. The credit component provides an overview of credit functions and operations including credit risk evaluation, loan creation and debt collection.

BT 0103 (MT 0103) FINANCIAL PLANNING/FINANCIAL OPERATIONS  
IBED 0228 Semester/Trimester

A course that introduces the students to the financial planning process and the components of a comprehensive financial plan. The students learn how to prepare a financial plan that includes saving, investing, borrowing, risk management (insurance), and retirement and estate planning.

BT 0104 (MT 0104) INTERNATIONAL FINANCE

IBED 0229

Semester/Trimester

A course which explores major components of the international financial system. It includes the study of foreign trade, the international monetary system, foreign exchange rates, foreign exchange markets, international financial markets, international banking, and the multinational corporation.

BT 0105 (MT 0105) ECONOMICS &amp; THE WORLD OF FINANCE

IBED 0227

Semester/Trimester

A course covering macro and micro-economics which provides an understanding of how our market economy functions in a global setting. It provides students with a survey of economic concepts including all of the basic principles recommended by the National Council on Economic Education. In addition, a unit on capital markets acquaints the students with the role that various markets and securities play in the U.S. Economy.

BT 0106 (MT 0106) SECURITIES

IBED 0231

Semester/Trimester

A course focusing on the roles and functions of a modern securities organization. Through a study of the structure of brokerage firms, the trading process, credit and margin practices, automated processes, and government regulations, students gain an understanding of how a securities firm services its customers and plays an important role in our economy. Students are given the opportunity to relate their knowledge of economics, accounting, and data processing to the operations areas of various sectors of the securities industry. Emphasis is placed on the skills and attitudes necessary for success in business and college. NOTE: This course may be combined with Insurance, in a course titled "Securities and Insurance".

BT 0107 (MT 0107) INSURANCE

IBED 0232

Semester/Trimester

A course that introduces students to various elements of the insurance industry, including insurance needs and products for businesses and individuals. Students learn about insurance sales, rate-setting, insurance and financial planning, insurance regulations, and careers in the industry. NOTE: this course may be combined with Insurance, in a course titled "Securities and Insurance".

## FAMILY AND CONSUMER SCIENCES

### Middle School/Junior High (Grades 6 - 8) \* (Not eligible for PTE funding)

**IBEDS**

0501	FC 0020	Exploratory Family and Consumer Science (Grades 6 - 7 only) *
0512	FC 0030	Young Living (8 <sup>th</sup> Grade) *
0521	FC 0040	Technology, Life and Careers (Grades 7 & 8) *(BE & TE 0061) <sup>2</sup>

### PROFESSIONAL-TECHNICAL APPROVED COURSES

Grades 9 -12

0513	FC 0101	Teen Living
0503	FC 0201	Nutrition & Foods
0505	FC 0202	Parenting & Child Development
0516	FC 0204	Career & Personal Development
0517	FC 0207	Personal and Family Finance/Consumer Economics
0514	FC 0301	Adult Living
0515	FC 0302	Family Health and Wellness
0519	FC 0501	Teen Parenting
0522	FC 0535	Introduction to Health Care and Human Service Occupations (HP 0535) <sup>3</sup>
0504	FC 0551	Food Science and Nutrition
0506	OF 0550	Apparel Design and Merchandising <sup>4</sup>
0523	OF 0570	Housing, Interiors and Furnishings <sup>4</sup>

NOTE: FCCLA (Family Career and Community Leaders of America) activities should be an integral part of all FACS courses

### OCCUPATIONAL FAMILY AND CONSUMER SCIENCES PROFESSIONAL-TECHNICAL APPROVED COURSES

Grades 11-12

0518	OF 0520	Entrepreneurship Experience
0531	OF 0530	Early Childhood Professions
0507	OF 0540	Food Production, Management and Service
0506	OF 0550	Apparel Design and Merchandising <sup>3</sup>
1872	OF 0560	Hospitality Services/Tourism (ME 0250) <sup>3</sup>
0523	OF 0570	Housing, Interiors and Furnishings <sup>4</sup>
0533	OF 0580	Education Assistant
0543	OF 0590	Human Services
0597	OF 9800	Occupational and Career Experience
0598	OF 9900	Cooperative Education

NOTE: FCCLA (Family Career and Community Leaders of America) activities should be an integral part of all FACS courses

### OTHER COURSES AND ASSIGNMENTS

<b>0850</b>	<b>PR 0001</b>	<b>Preparation Period</b>
<i>To be assigned</i>	00 0000	No Class or Activity
<i>To be assigned</i>	AC 0017	All other courses/Activities - including other FCS courses (i.e. Clothing Construction, Advanced Foods, Foreign Foods, Apparel & Housing, Senior Foods)
<i>To be assigned</i>	AC 0019	Other Professional-Technical Courses

<sup>2</sup> Courses cross-coded to other program areas can be taught by teachers holding either endorsement.

<sup>3</sup> Apparel Design and Merchandising and Housing, Interiors and Furnishings may also be taught as one semester Introductory courses in grades 10-12 and will be funded as non-occupational Family and Consumer Sciences courses.

## FAMILY AND CONSUMER SCIENCES EDUCATION

### Capstone Courses

For Performance Measures and follow-up purposes, a Program Completer is defined as a **senior** student who, as either a junior or senior, has taken a capstone course.

The following occupational sequences are provided to help identify program completers and capstone courses.

### OCCUPATIONAL FAMILY AND CONSUMER SCIENCES

#### Program Sequence

#### Food Production, Management and Service

FC 0201	Nutrition and Foods ** and/or
FC 0551	Food Science and Nutrition ** (1-2 semesters/ trimester)
*OF 0540	Food Production Management and Service (year long)
*OF 9900	Cooperative Education/Work Experience

#### Housing, Interiors and Furnishings

FC 0101	Teen Living ** and/or
FC 0204	Career & Personal Development **
*OF 0570	Housing, Interiors and Furnishings (year long)
*OF 9900	Cooperative Education/Work Experience

#### Early Childhood Professions

FC 0535	Introduction to Healthcare and Human Services Occupations** and/or
FC 0202	Parenting & Child Development **
*OF 0530	Early Childhood Professions (year long)
*OF 9900	Cooperative Education/Work Experience

#### Hospitality Services/Tourism

FC 0201	Nutrition and Foods** and/or
FC 0204	Career & Personal Development **
*OF 0560	Hospitality Services/Tourism (year long)
*OF 9900	Cooperative Education/Work Experience

#### Apparel Design and Merchandising

FC 0101	Teen Living** and/or
FC 0204	Career & Personal Development **
*OF 0550	Apparel Design and Merchandising (year long)
*OF 9900	Cooperative Education/Work Experience

#### Entrepreneurship Experience

FC 0204	Career & Personal Development **
*OF 0520	Entrepreneurship Experience (year long)
*OF 9900	Cooperative Education/Work Experience

#### Human Services

FC 0535	Intro to Health Care & Human Service Occupations ** and/or
FC 0204	Career & Personal Development**
*OF0590	Human Services
*OF 9900	Cooperative Education/Work Experience

#### Education Assistant

FC 0202	Parenting & Child Development ** and/or
FC 0202	Career & Personal Development ** and/or
FC 0535	Intro to Health Care & Human Service **
*OF0580	Education Assistant (year long)
*OF 9900	Cooperative Education/Work Experience

\*Capstone courses for the sequence option - Capstone courses are those in which the Occupational Competency Attainment will be measured. The content of capstone courses will be of an advanced nature.

**Please Note:** **Capstone courses** must be preceded by the required prerequisite. An occupational experience must also include a simulation, work or service learning experience. FCCLA is an integral part of all Occupational programs.

\*\*Prerequisites (semester/trimester)

**NON-OCCUPATIONAL FAMILY AND CONSUMER SCIENCES****Adult Living**

FC 0101 Teen Living - **or one or more courses in Family & Consumer Sciences** \*\*

\*FC 0301 Adult Living (year long)

\*Capstone courses for the sequence option - Capstone courses are those in which Competency Attainment will be measured. The content of capstone courses will be of an advanced nature.

**Please Note:** The **capstone course** must be preceded by the required prerequisite. FCCLA is an integral part of all FCS programs.

\*\*Prerequisites (semester/trimester)



## FAMILY AND CONSUMER SCIENCES

FC 0020  
IBED 0501

EXPLORATORY FAMILY AND CONSUMER SCIENCE (Grades 6 - 8)  
6 - 9 Weeks

A course designed to help early adolescents identify their interests and abilities in the areas of personal development, careers, practical technical skills, child care, personal living space, money matters, and foods for wellness. FCCLA<sup>4</sup> activities should be integrated into this course.

FC 0030  
IBED 0512

YOUNG LIVING (Grade 8)  
9 - 18 Weeks

A course designed to be offered in a format that can be incorporated into an interdisciplinary curriculum. The emphasis of the course will be to develop knowledge and skills in the areas of personal development, careers, clothing, family relationships, personal finances, personal living space, foods and wellness. FCCLA activities should be integrated into this course.

FC 0040 (BE 0061, TE 0061) TECHNOLOGY, LIFE and CAREERS (Grades 6 - 8)  
IBED 0521

One or Two Semesters/Trimesters

This introductory interdisciplinary offering allows students to explore a wide variety of occupations in all six of Idaho's Career Pathways. The content includes the basic knowledge, skills and attitudes needed for success in all occupations. This experience will use technology to explore career interests, the world of work, human relations skills, health and safety issues, technology applications and process skills. Students will deal with situations and issues relating to self, family, workplace, community and the world. It is recommended that students have an opportunity to observe or volunteer in work and/or community settings. Students who complete this experience will be better prepared to develop a four-year parent-approved student learning plan by the end of grade 8. FCCLA activities should be integrated into this course.

FC 0101  
IBED 0513

TEEN LIVING  
One or Two Semesters/Trimesters

A year-long course planned in two independent but sequential semester/trimester segments. The emphasis of this course is to build on skills in the areas of personal development, relationships, human and family development, clothing, resource management, personal living space, nutrition and wellness, career choices and leadership skills. This course focuses on the student's role and responsibility as a teen participating in the family, school and community. FCCLA activities should be integrated into this course.

FC 0201  
IBED 0503

NUTRITION & FOODS  
Semester/Trimester

A course designed to address nutrition, wellness and personal lifestyle. Content emphasis includes food safety and sanitation, food preparation techniques, meal management skills, consumer skills, nutrition, and career options in nutrition and related fields. This course is a prerequisite for Food Production, Management and Service. FCCLA activities should be integrated into this course.

FC 0202  
IBED 0505

PARENTING & CHILD DEVELOPMENT  
One or Two Semesters/Trimesters

This course emphasizes parenting choices and parenting decisions. Content includes stages of prenatal development and the physical, intellectual, social and emotional development of the infant and young child. This course is designed to strengthen parenting and guidance skills, positive family relationships, safety and health practices. Students will learn to evaluate child care services, and to explore careers related to young children. This course is a prerequisite for Early Childhood Professions and Education Assistant. FCCLA activities should be integrated into this course.

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<sup>4</sup> FCCLA (Family, Career and Community Leaders of America) is the student organization integral to Family and Consumer Sciences Education.

FC 0204  
IBED 0516

CAREER AND PERSONAL DEVELOPMENT  
Semester/Trimester

The concepts included in this course are the foundations of occupational and tech prep programs. Designed to be part of all tech prep programs, this is a one-semester/trimester course focusing on the practical aspects of investigating, pursuing, achieving, and keeping employment in a global society. The curriculum emphasizes self awareness, communications, employability skills, leadership and balancing work and family. This course is to be taught by a certified Family and Consumer Sciences instructor. FCCLA activities should be integrated into this course.

FC 0207  
IBED 0517

PERSONAL AND FAMILY FINANCE/CONSUMER ECONOMICS  
Semester/Trimester

This course emphasizes financial skills for personal and family well-being; balancing work and family; management of resources; financial services and responsibilities; responsible use of credit; consumer decisions, rights and responsibilities; and economics for the individual and the world. This course is designed to be offered as an alternative to earn Consumer Economics credit when taught by a certified Family and Consumer Sciences teacher with a Consumer Economics endorsement. Idaho Achievement Standards for Economics and Personal Finance have been included in this course. FCCLA activities should be integrated into this course.

FC 0301  
IBED 0514

ADULT LIVING  
One or Two Semesters/Trimesters

A course designed to focus on the young adult as an individual preparing for responsibilities in the home, family, community and work environment. The student will gain relationship skills and life management skills, utilize problem-solving methods, management processes, employment, and leadership skills. Adult Living is designed as two independent but sequential semesters/ trimesters with one semester focusing on independent living skills and one semester on relationship skills. FCCLA activities should be integrated into this course.

FC 0302  
IBED 0515

FAMILY HEALTH and WELLNESS  
Semester/Trimester

A one-semester/trimester course designed to prepare individuals with the basic principles of physical, emotional, social and mental well-being. Key content includes personal health and wellness, healthy growth and development, family health and wellness; managing health resources; careers in the health field; and community, national and world health. This course is designed to be offered as an alternative to earn credit in Health when taught by a certified Family and Consumer Sciences instructor with a Health endorsement. Idaho Achievement Standards for Health have been included in this course. FCCLA activities should be integrated into this course.

FC 0501  
IBED 0519

TEEN PARENTING  
Two Semesters/Trimesters

A course designed to help teen-age parents with their unique roles and responsibilities as parents. Emphasis is on pregnancy, pre-natal development; early childhood development, nurturing and guidance; decision making and goal setting; parenting roles and responsibilities; child nutrition, health and safety; parenting resources; and child care services. A guided laboratory experience in working with infants and young children is recommended.

FC 0535 (HP 0535)  
IBED 0522

INTRODUCTION TO HEALTH CARE AND HUMAN SERVICE OCCUPATIONS  
Semester/Trimester

A one-semester/trimester course that introduces students to the knowledge, basic skills and attitudes needed to become a health care or human service worker. Students can continue into Health Professions or Family and Consumer Science programs that will qualify them for employment and/or further education. Students will apply knowledge of working in a variety of health care and human services environments. This course is part of the recommended course selections within the Human Resources and Health Services Career Pathways.

FC 0551  
IBED 0504

**FOOD SCIENCE AND NUTRITION**  
One or Two Semesters/Trimesters

The focus of this course is on the scientific and chemical basis of nutrition, food preparation, preservation, processing, and related consumer topics. Food scientists use scientific methods to conduct lab experiments with food. The preparation of edible food products is not the primary purpose of a food science course, although such products may be the result of experiments performed. Activities and experiments integrate science, mathematics, and language arts. The course provides an option for students to earn a lab science credit for college/university admission when taught by a Family and Consumer Sciences instructor with a Natural Science endorsement. Students with interest/career plans in food science or dietetics will benefit from this course.

**OCCUPATIONAL FAMILY AND CONSUMER SCIENCES**

OF 0520  
IBED 0518

**ENTREPRENEURSHIP EXPERIENCE**  
Two Semesters/Trimesters

Prerequisite: Nutrition and Foods or  
Career & Personal Development

A year-long course preparing individuals for employment or entrepreneurship in a variety of occupations utilizing knowledge and skills in family and consumer sciences education. Skill development is achieved through the classroom laboratory, and a school-based enterprise or cooperative work experience. Classroom instruction includes workplace knowledge and skills. FCCLA activities should be integrated into this course.

OF 0530  
IBED 0531

**EARLY CHILDHOOD PROFESSIONS**  
Two Semesters/Trimesters

Prerequisite: Introduction to Health Care  
and Human Services Occupations and/or  
Parenting & Child Development

A year-long course designed to prepare students to work with young children in a variety of occupational settings related to the young child. Emphasis is on employability skills, human development, care-giving techniques and management skills. Work site experiences provide opportunities to observe, plan and direct activities for young children. Articulation agreements with technical programs provide credit and a smooth transition to further education. FCCLA activities should be integrated into this course.

OF 0540  
IBED 0507

**FOOD PRODUCTION, MANAGEMENT and SERVICE**  
Two Semesters/Trimesters

Prerequisite: Nutrition & Foods

A year-long course in professional food preparation with practical applications emphasizing: career opportunities, reinforced basic skills, food safety and sanitation, use of commercial equipment, industrial food preparation, business management, service techniques and employability skills. Work experiences may be in a school-based enterprise, district food service, local restaurants or other food production establishments. FCCLA activities should be integrated into this course.

OF 0550 <sup>5</sup>  
IBED 0506

**APPAREL DESIGN AND MERCHANDISING**  
Two Semesters/Trimesters

Prerequisite: Career & Personal  
Development and/or Teen Living

A year-long course that prepares students for employment in the apparel design and merchandising industry. The course emphasizes career opportunities; textile and garment design; trends and cycles; manufacturing and production; and business procedures in buying, selling, displaying, publicizing and advertising. Skill development in design, production and alteration will be included. Work-based experiences may be through a school-based enterprise or community business partner. FCCLA activities should be integrated into this course.

<sup>5</sup> Apparel Design and Merchandising and Housing, Interiors and Furnishings may also be taught as one semester introductory courses and will be funded as non-occupational Family and Consumer Sciences courses.

OF 0560 (ME 0250) HOSPITALITY SERVICES/TOURISM  
IBED 1872

Two Semesters/Trimesters

Prerequisite: Nutrition & Foods and/or  
Career and Personal Development

A year-long course designed to meet the needs of students who seek to enter the growing field of hospitality blending communications and human relations skills with technical proficiency. This course is designed to prepare students for employment in positions that provide customer-focused services in such facilities as hotels, meeting centers, shopping malls and recreation parks. A work experience should be in area hotels, motels or other hospitality-related job sites. FCCLA activities should be integrated into this course.

OF 0570 <sup>6</sup>  
IBED 0523

HOUSING, INTERIORS AND FURNISHINGS  
Two Semesters/Trimesters

Prerequisite: Career & Personal  
Development and/or Teen Living

A year-long course that integrates knowledge, skills and practices required for careers in the housing, interiors and furnishings industry. Students will evaluate housing decisions, develop and practice design techniques, and demonstrate skills through visual presentations. Instruction includes design principles, construction techniques, and materials and equipment selection. A work experience in the housing, interiors and furnishing industry is an integral part of this course. FCCLA activities should be integrated into this course.

OF 0580  
IBED 0533

EDUCATION ASSISTANT  
Two Semesters/Trimesters

Prerequisite: Parenting & Child Development  
and/or Career and Personal Development  
or Introduction to Health Care and  
Human Service Occupations

Following an orientation period, students in the Education Assistant program are assigned to a preschool, elementary or middle school classroom where they assist the teacher and have the opportunity to try out the role of a teacher. This year-long course prepares individuals for further education opportunities at the post-secondary level in paraprofessional or teacher education programs. Students work one-on-one with students who have special needs, help monitor the academic progress and support the classroom teacher's instructional, behavioral and management plan. Students also work on developing self-management, communication, social and organizational skills needed to enter the education field. Articulation agreements with postsecondary schools provide credit and a smooth transition to further education. The FCCLA student organization should be integral to this program.

OF 0590  
IBED 0543

HUMAN SERVICES  
Two Semesters/Trimesters

Prerequisite: Introduction to Health Care and  
Human Service Occupations and/or  
Career & Personal Development

A year-long course that focuses on the functional roles and responsibilities of human services professionals and how they apply their skills to assist individuals and families in the areas of consumer services, personal services, family and community services, counseling and early childhood services. Students in human services gain knowledge and skills through coordinated workplace learning experiences such as site visits, job shadowing and internships. This course may articulate to a variety of human services programs at the postsecondary level to prepare for degrees and industry certifications that prepare learners for professional and technical careers. Family Career and Community Leaders of America (FCCLA) activities are integral components of both the core employability skills and the technical skills and should be incorporated throughout instructional strategies of the program.

OF 9800

OCCUPATIONAL AND CAREER EXPERIENCE

IBED 0597

One or Two Semesters/Trimesters

Prerequisite: Introduction to Health Care and  
Human Service Occupations and/or  
Career & Personal Development

A community-based work experience organized and planned to develop knowledge and skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work or service learning experiences related to the career objectives of the student. The experiences must be supervised and monitored by the teacher through a training plan. FCCLA activities should be integrated into this course.

OF 9900

IBED 0598

COOPERATIVE EDUCATION

One or Two Semesters/Trimesters

Perquisite: Enrollment in an Occupational  
Family and Consumer Sciences program

Community-based instruction organized and planned to provide specialized skills unique to an occupation or industry following an occupational FCS class. Students are placed in businesses that provide paid on-the-job experience related to the student's primary area of study in one of the FCS Occupational programs. The experience must be supervised by the teacher and students must have a training plan and agreement with the business partner.

## HEALTH PROFESSIONS EDUCATION

### PROFESSIONAL-TECHNICAL APPROVED COURSES

#### IBEDS

1501	HP 0130	Orientation to Health Professions
1520	HP 0133	Fundamentals for Health Professions
1504	HP 0230	Nursing Assistant
1521	HP 0233	Mental Health Assistant
1525	HP 0234	Health Unit Clerk/Coordinator
1513	HP 0235	Medical Assistant
1517	HP 0237	Emergency Medical Technician - Basic
1518	HP 0238	Pharmacy Technician
1519	HP 0239	Assistance with Medications
1523	HP 0330	Fundamentals of Dental Assisting
1526	HP 0432	Physical Therapy Aide
1527	HP 0434	Occupational Therapy Aide
1528	HP 0435	Speech-Language Pathology Aide
1506	HP 0440	Home Care Aide
1535	HP 0442	Combined Nursing Assistant and Providing Services to People with Disabilities
1536	HP 0445	Sports Medicine/Athletic Training
1594	HP 0530	Providing Services to People with Disabilities
1502	HP 0535	Introduction to Health Care and Human Service Occupations (FC 0535 <sup>6</sup> )
1514	HP 0630	Medical Terminology for Healthcare
To be assigned	HP 0632	Advanced Medical Terminology
To be assigned	HP 0634	Introduction to Medical Transcription (Pilot Course)
To be assigned	HP 0636	Introduction to Medical Coding (Pilot Course)
1529	HP 0730	Anatomy and Physiology for Health Professions
1597	HP 9800	Clinical Education
1598	HP 9900	Cooperative Education

### OTHER COURSES AND ASSIGNMENTS

<b>0850</b>	<b>PR 0001</b>	<b>Preparation Period</b>
To be assigned	00 0000	No Class or Activity
To be assigned	AC 0017	All other courses/Activities
To be assigned	AC 0019	Other Professional-Technical Courses

<sup>6</sup> Courses cross-coded to other program areas can be taught by teachers holding either endorsement.

## HEALTH PROFESSIONS EDUCATION

### Capstone Courses

For Performance Measures and follow-up purposes, a Program Completer is defined as a senior student who, as either a junior or senior, has taken a capstone course.

HP 0130	Orientation to Health Professions
HP 0133	Fundamentals for Health Professions
*HP 0230	Nursing Assistant
*HP 0233	Mental Health Assistant
*HP 0234	Health Unit Clerk/Coordinator
*HP 0235	Medical Assistant
*HP 0237	Emergency Medical Technician - Basic
*HP 0238	Pharmacy Technician
*HP 0239	Assistance with Medications
*HP 0330	Fundamentals of Dental Assisting
*HP 0432	Physical Therapy Aide
*HP 0434	Occupational Therapy Aide
*HP 0435	Speech-Language Pathology Aide
*HP 0440	Home Care Aide
*HP 0442	Combined Nursing Assistant and Providing Services to People With Disabilities
*HP 0445	Sports Medicine/Athletic Training
*HP 0530	Providing Services to People With Disabilities
HP 0535 (FC 0535)	Introduction to Health Care and Human Service Occupations
HP 0630	Medical Terminology for Healthcare
*HP 0632	Advanced Medical Terminology (Pilot Course)
*HP 0634	Introduction to Medical Transcription (Pilot Course)
*HP 0636	Introduction to Medical Coding (Pilot Course)
HP 0730	Anatomy and Physiology for Health Professions
*HP 9800	Clinical Education
*HP 9900	Cooperative Education

\* Capstone course for the sequence option - Capstone courses are those in which the Occupational Competency Attainment will be measured. The content of capstone courses will be of an advanced nature.

Please note: Orientation to Health Professions (HP 0130), or Fundamentals for Health Professions (HP 0133) is a prerequisite to all capstone courses.

## HEALTH PROFESSIONS EDUCATION

HP 0130  
IBED 1501

ORIENTATION TO HEALTH PROFESSIONS  
Two Semesters/Two Trimesters

Prerequisite: None

An exploratory course that provides the student initial exposure and acquisition of knowledge, skills and attitudes associated with a broad range of occupations relating to careers in health including job requirements and tasks performed. This course will assist students in making informed decisions regarding their future academic and occupational goals in the health care field.

HP 0133  
IBED 1520

FUNDAMENTALS FOR HEALTH PROFESSIONS  
Two Semesters/Two Trimesters

Prerequisite: None

An online course that introduces students to the health care industry by exposing them to over one hundred health related careers. In addition, this course presents the fundamental knowledge that is common to all health professions. (Note: This course is equivalent to HP 0130 Orientation to Health Professions.)

HP 0230  
IBED 1504

NURSING ASSISTANT  
One or Two Semesters/Trimester

Prerequisite: Completion of Year  
One of Health Professions or Fundamentals  
for Health Professions **and** Permission of Instructor

A course designed to prepare students for beginning employment as nursing assistants in nursing homes, hospitals, and other settings. Successful completion of the course qualifies the student to test for the Registry for Nursing Assistants. Content includes medical terminology, anatomy and physiology, care of the patient, and assisting as a member of the health care team.

HP 0233  
IBED 1521

MENTAL HEALTH ASSISTANT  
One Semesters/Two Trimesters

Prerequisite: Completion of Year One of  
Health Professions or Fundamentals for  
Health Professions, the Nursing Assistant  
Program **and** Permission of the Instructor

A program of study that prepares the student to assist with the care of persons requiring services in the specialized field of mental health/mental illness. Students are prepared for employability and advanced study.

HP 0234  
IBED 1525

HEALTH UNIT CLERK/COORDINATOR  
One or Two Semesters

Prerequisite: Completion of Year One  
of Health Professions or Fundamentals  
for Health Professions

A course designed to prepare students as unit clerks in health care facilities. Students develop the knowledge, skills and attitudes necessary for employment as nonclinical workers within healthcare units. Areas of instruction include applied anatomy and medical terminology, communications (personal and communication devices), problem solving, environmental management, transcription of physicians' orders and problem solving. Student completion of actual work experience is desired.

HP 0235  
IBED 1513

MEDICAL ASSISTANT  
Secondary Level, Tech Prep Option  
One or Two Semesters/Trimester

Prerequisites: Completion of Year One  
of Health Professions or Fundamentals  
for Health Professions **and** the  
Nursing Assistant curriculum

A course that begins at the secondary level in which students develop business and office skills, attitudes and knowledge that lead to two years and an Associate Degree as a medical assistant at the postsecondary level (Tech Prep Option). Skills from the nursing assistant course compliment the



skills needed in the clinical aspects of medical assisting.

HP 0237  
IBED 1517

EMERGENCY MEDICAL TECHNICIAN – BASIC  
Two Semesters/Trimesters

Prerequisite: Completion of Year One of  
Health Professions or Fundamentals  
for Health Professions

A course designed to instruct senior level high school students to the level of Emergency Medical Technician-Basic, a person who serves as a vital link in the chain of the health care team at a basic life support level with an ambulance service or other specialized service.

HP 0238  
IBED 1518

PHARMACY TECHNICIAN  
One or Two Semesters/Trimesters

Prerequisite: Orientation to Health Professions  
or Fundamentals for Health Professions

A self study course designed to prepare students for beginning employment as a Pharmacy Technician under the supervision of pharmacists in pharmacies, hospitals and other settings. Successful completion of the course qualifies the student to take the Pharmacy Technician Certifying Board certification exam. Content includes pharmaceutical terminology, drug identification, measurement techniques, record keeping, business operations, prescription preparation, logistics and dispensing operations and applicable standards and regulations.

HP 0239  
IBED 1519

ASSISTANCE WITH MEDICATIONS  
One or Two Semesters

Prerequisite: Completion of Year One  
of Health Professions or Fundamentals  
for Health Professions

A course that prepares unlicensed assistive personnel to administer prescribed medications; observe and report patient reactions and side effects and perform related emergency and recording duties under the supervision of nurses and/or physicians. Includes instruction in basic anatomy and physiology, common medications and their effects, taking vital signs, oxygen administration, medication administration and application, record-keeping and patient observation.

HP 0330  
IBED 1523

FUNDAMENTALS OF DENTAL ASSISTING  
Two Semesters/Trimester

Prerequisite: Completion of Year One of Health  
Professions or Fundamentals for Health  
Professions **and** Permission of Instructor

A course designed to provide the student with basic background knowledge, skills and attitudes for employment in a dental office as a beginning dental assistant. Areas of instruction include dental terminology, charting, cavity classification, infection control, local anesthesia, oral surgery, and ethics and jurisprudence.

HP 0432  
IBED 1526

PHYSICAL THERAPY AIDE  
Semester/Trimester

Prerequisites: Completion of Year One of Health  
Professions or Fundamentals for Health Professions,  
Sports Medicine **and** Permission of the Instructor

A course that introduces students to the basic knowledge, skills and attitudes for success in the field of physical therapy at the aide level. Content includes terminology, clerical, technical and therapeutic methods and the roles/responsibilities of each member of the physical therapy team.

HP 0434  
IBED 1527

OCCUPATIONAL THERAPY AIDE  
Semester/Trimester

Prerequisites: Completion of Year One of Health  
Professions or Fundamentals for Health Professions,  
the Nursing Assistant and Providing Services to People  
with Disabilities Courses **and** Permission of the Instructor

A course that introduces students to the basic knowledge, skills and attitudes for success in the field of occupational therapy at the aide level. Content includes terminology, clerical, technical and

therapeutic methods and the roles/responsibilities of each member of the occupational therapy team.

HP 0435  
IBED 1528

SPEECH-LANGUAGE PATHOLOGY AIDE  
Semester/Trimester

Prerequisites: Completion of Year One of Health Professions or Fundamentals for Health Professions, Nursing Assistant and Providing Services to People with Disabilities Courses **and** Permission of the Instructor

A course that introduces students to the basic knowledge, skills and attitudes for success in the field of speech-language pathology at the aide level. Content includes communications; speech, language and hearing communication delays, disorders and differences; behavior management; and assistance with individual treatment plans.

HP 0440  
IBED 1506

HOME CARE AIDE  
One Semesters/Trimesters

Prerequisite: Completion of Year One of Health Professions or Fundamentals for Health Professions, first semester of Nursing Assistant **and** Permission of Instructor

A course that provides nursing assistant training for care of people in their homes. Emphasis of instruction is on care of older adults within the family and on home management skills. Successful completion of the course qualifies the student to test for the Idaho Registry for Nursing Assistants, employment as a Home Care Aide, and for advanced education.

HP 0442  
IBED 1535

COMBINED NURSING ASSISTANT AND PROVIDING SERVICES TO PEOPLE WITH DISABILITIES  
Semester/Trimester

Prerequisites: Completion of Year One of Health Professions or Fundamentals for Health Professions **and** Permission of the Instructor and 1 semester of Nursing Assistant

A course that combines the essentials of the Nursing Assistant Course with the Providing Services to People with Disabilities course. Students earn a certificate that qualifies them to be Personal Care Providers.

HP 0445  
IBED 1536

SPORTS MEDICINE/ATHLETIC TRAINING  
Two Semesters/Two Trimesters

Prerequisites: Completion of Year One of Health Professions or Fundamentals for Health Professions

A program that introduces students to the basic knowledge, skills and attitudes needed to assist in the career fields of Sports Medicine and Athletic Training. Students explore related careers and may assist, with permission, with athletic training teams.

HP 0530  
IBED 1594

PROVIDING SERVICES TO PEOPLE WITH DISABILITIES  
Semester/Trimester

Prerequisites: Completion of Year One of Health Professions or Fundamentals for Health Professions, the Nursing Assistant course **and** Permission of the Instructor

A course that introduces students to the role and responsibilities of people who provide services to persons with disabilities. Content includes emphasis on rights, ethical treatment, planning, and promoting personal growth of people with disabilities. This course can be taken as an independent study if the student is providing services to a person with disabilities.

HP 0535 (FC 0535)  
IBED 1502

INTRODUCTION TO HEALTH CARE AND HUMAN SERVICE OCCUPATIONS  
Semester/Trimester

Prerequisite: None

An introductory semester length course (preferably taken in the freshman or sophomore year) that concentrates on classroom education and laboratory practices that introduce students to the

knowledge, basic skills and attitudes needed to become a health care or human service worker. Students interested in becoming a health care or human service worker can continue on into the Health Professions or Family and Consumer Science programs that will qualify them for employment and/or higher education. Students will apply knowledge of working in a variety of health care and human services environments. Emphasis will be on the diversity of clients and competencies to be successful in health care and human service occupations.

HP 0630  
IBED 1514

MEDICAL TERMINOLOGY FOR HEALTH PROFESSIONS  
Semester/Trimester

Prerequisite: Orientation to Health Professions; Fundamentals for Health Professions; **or** concurrent enrollment

This course presents a study of medical terminology. Prefixes, suffixes, word roots, combining forms, special endings, plural forms, abbreviations, and symbols are included in the content. All body systems, anatomical reference, pharmacology, and medical specialties will be considered. Emphasis is placed on spelling, definition, usage, and pronunciation.

HP 0632  
IBED To be assigned

ADVANCED MEDICAL TERMINOLOGY (*Pilot Course*)  
Semester/Trimester

Prerequisite: Orientation to Health Professions or Fundamentals for Health Professions and Medical Terminology for Health Professions

A medical terminology course designed with a bilingual focus.

HP 0634  
IBED To be assigned

INTRODUCTION TO MEDICAL RECORDS TRANSCRIPTION (*Pilot Course*)  
Semester/Trimester

Prerequisite: Orientation to Health Professions or Fundamentals for Health Professions and Medical Terminology for Health Professions

This course presents the opportunity to transcribe medical reports from individual case studies taken from hospital medical records. The reports include history and physical examinations, radiology reports, operative reports, pathology reports, requests for consultations, death summaries, discharge summaries, and autopsy reports. Specialty areas related to the body systems are emphasized. Helps prepare students to take the Certified Medical Transcription examination.

HP 0636  
IBED To be assigned

INTRODUCTION TO MEDICAL CODING (*Pilot Course*)  
Semester/Trimester

Prerequisite: Orientation to Health Professions or Fundamentals for Health Professions and Medical Terminology for Health Professions

This course presents an overview of the medical record and coding procedures, to include the International Classification of Diseases, 9<sup>th</sup> edition, Clinical Manifestation (ICD-9-CM) and Common Procedural Terminology (CPT). Interpretation of health record documentation using knowledge of anatomy, physiology, clinical disease processes, pharmacology, and medical terminology to identify codable diagnoses and/or procedures is emphasized. Ethical and legal issues are also addressed.

HP 0730  
IBED 1529

ANATOMY AND PHYSIOLOGY FOR HEALTH PROFESSIONS  
Semester/Trimester

Prerequisite: Orientation to Health Professions or Fundamentals for Health Professions and Medical Terminology for Health Professions

A course designed to help students master the structural and functional elements and relationships of the human body as they pertain to the health professions.

HP 9800  
IBED 1597

CLINICAL EDUCATION  
Semester/Trimester

Prerequisite: Completion of year-one of Health Professions or Fundamentals for Health Professions or prior enrollment in capstone course

A community based work experience activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objectives of the student. The experiences must be supervised and monitored by the teacher. (Note: This course must be approved on an individual program basis by the State Division.)

HP 9900  
IBED 1598

COOPERATIVE EDUCATION  
Semester/Trimester

Prerequisite: Completion of year-one of Health Professions or prior enrollment in capstone course

Community based instruction organized and planned to provide specialized skills unique to an occupation or industry. Students are placed in businesses which provide paid on-the-job experience which is related to the student's primary area of study. The experience must be supervised by the teacher and students must have a training plan.

## INDIVIDUALIZED OCCUPATIONAL TRAINING

### PROFESSIONAL-TECHNICAL APPROVED COURSES

**IBEDS**

1650	OT 0100	Introduction to Career Pathways
1651	OT 0110	Work-Based Learning Experience I
1652	OT 0120	Work-Based Learning Experience II
1653	OT 0130	Work-Based Learning Experience III
1654	OT 0140	Work-Based Learning Experience IV & V

### OTHER COURSES AND ASSIGNMENTS

<b>0850</b>	<b>PR 0001</b>	<b>Preparation Period</b>
<i>To be assigned</i>	00 0000	No Class or Activity
<i>To be assigned</i>	AC 0017	All other courses/Activities
<i>To be assigned</i>	AC 0019	Other Professional-Technical Courses

NOTE: An approved IOT program must contain at least one semester of Introduction to Career Pathways (OT 0100) and at least two semesters of Work-Based Learning Experience (OT 0110-OT 0140). The last semester should be a work-based learning experience in an occupational field related to the career choice of the student.

## INDIVIDUALIZED OCCUPATIONAL TRAINING

### Capstone Courses

For Performance Measures and follow-up purposes, a Program Completer is defined as a senior student who, as either a junior or senior, has taken a capstone course.

OT 0100	Introduction to Career Pathways
OT 0110	Work-Based Learning Experience I
OT 0120	Work-Based Learning Experience II
OT 0130	Work-Based Learning Experience III
*OT 0140	Work-Based Learning Experience IV & V

NOTE: An IOT program must contain at least one semester of Introduction to Career Pathways (OT 0100) and at least two semesters of Work-Based Learning Experience (OT 0110-OT 0140). The last semester should be a work-based learning experience in an occupational field related to the career choice of the student.

\* **Capstone course** for the sequence option should be the last semester of a student's Senior year (Work-Based Learning Experience V) - Capstone courses are those in which the Occupational Competency Attainment will be measured. The content of capstone courses will be of an advanced nature.

## INDIVIDUALIZED OCCUPATIONAL TRAINING

### Program Description:

Individualized occupational training (IOT) programs will provide organized, work-based learning experiences to fit individual student career choices and expand the range of applied technical education a school can offer. The IOT program sequence includes an introductory course, "Introduction to Career Pathways", and a series of work-based learning experiences at community worksites.

OT 0100 IBED 1650	INTRODUCTION TO CAREER PATHWAYS Semester/Trimester	Prerequisite: None
	An introductory course designed to assist students in establishing career and educational direction, and to prepare them for individualized occupational education uniquely suited to their strengths and motivations.	
OT 0110 IBED 1651	* WORK-BASED LEARNING EXPERIENCE I Semester/Trimester	Prerequisite: Introduction to Career Pathways
	An introductory work-based learning experience at an approved worksite in an occupational training area not available at the school. Technical instruction is provided by a community worksite mentor/trainer and coordinated by a certified work-based learning coordinator. Training plans and agreements are required. All students must have training plans developed from an occupational training outline that meets current industry standards.	
OT 0120 IBED 1652	WORK-BASED LEARNING EXPERIENCE II Semester/Trimester	Prerequisite: Work-Based Learning Experience I
	A continuation of Work-Based Learning Experience I. Duties and tasks not mastered in the occupational training outline will be identified.	
OT 0130 IBED 1653	WORK-BASED LEARNING EXPERIENCE III Semester/Trimester	Prerequisite: Work-Based Learning Experience II
	A continuation of Work-Based Learning Experience II. Duties and tasks not mastered in the occupational training outline will be identified.	
OT 0140 IBED 1654	WORK-BASED LEARNING EXPERIENCE IV & V Semester/Trimester	Prerequisite: Work-Based Learning Experience III
	A continuation of Work-Based Learning Experience III. Duties and tasks not mastered in the occupational training outline will be identified. Work-Based Learning Experience V should be taken during the second semester of the student's Senior year and should include a work-based learning project completed by the student.	

\* Some occupations may have a minimum age requirement.

## MARKETING EDUCATION

### PROFESSIONAL-TECHNICAL APPROVED COURSES

**IBEDS**

0221	ME 0100	Introduction to Business Professions (BE 0100 <sup>7</sup> )
0223	ME 0150	Business Technology (BE 0150)
1854	ME 0200	Marketing Economics (BE 0200)
1872	ME 0250	Hospitality/Tourism (OF 0560)
1855	ME 0300	Principles of Marketing (BE 0300)
1868	ME 0328	eCommerce/Business to Business (BE 0328)
1856	ME 0340	Introduction to International Business/Marketing (BE 0340)
1857	ME 0341	International Business/Marketing I (BE 0341)
1858	ME 0342	International Business/Marketing II (BE 0342)
1814	ME 0350	Retail Merchandising
1824	ME 0400	Principles of Promotion
1826	ME 0500	Principles of Management
1817	ME 0550	Sports and Entertainment Marketing
0224	ME 0600	Business Ownership/Entrepreneurship (BE 0600)
1825	ME 0700	Marketing Education Lab
1897	ME 9800	Occupational and Career Experience
1898	ME 9900	Cooperative Education

### ACADEMY OF FINANCE

(Codes for approved National Academy of Finance programs only)

0230	MT 0100	Introduction to Financial Services I (BT 0100)
0222	MT 0101	Strategies for Success (BT 0101)
0226	MT 0102	Banking and Credit (BT 0102)
0228	MT 0103	Financial Planning/Financial Operations (BT 0103)
0229	MT 0104	International Finance (BT 0104)
0227	MT 0105	Economics and the World of Finance (BT 0105)
0231	MT 0106	Securities (BT 0106)
0232	MT 0107	Insurance (BT 0107)

### ACADEMY OF TRAVEL AND TOURISM

(Codes for approved National Academy of Travel and Tourism programs only)

1871	MT 0200	Introduction to Travel & Tourism (OF 0560)
1875	MT 0201	English for Travel & Tourism
1876	MT 0202	Geography for Travel & Tourism
1877	MT 0203	Travel & Tourism II: Travel as a Business

### OTHER COURSES AND ASSIGNMENTS

<b>0850</b>	<b>PR 0001</b>	<b>Preparation Period</b>
<i>To be assigned</i>	00 0000	No Class or Activity
<i>To be assigned</i>	AC 0017	All other courses/Activities
<i>To be assigned</i>	AC 0019	Other Professional-Technical Courses

<sup>7</sup> Courses cross-coded to other program areas can be taught by teachers holding either endorsement.



## MARKETING EDUCATION

### Capstone Courses

For Performance Measures and follow-up purposes, a Program Completer is defined as a **senior** student who, as either a junior or senior, has taken a capstone course.

Possible marketing class combinations are numerous and vary as to the decision of the instructor. The following sequences are provided to help you identify completers. ME 0100 Intro to Business Professions or equivalent (one semester/trimester) is recommended as a prerequisite to all options.

#### Retail Marketing

ME 0150 Business Technology  
ME 0200 Marketing Economics  
ME 0300 Principles of Marketing  
\*ME 0350 Retail Marketing

#### Advertising /Display

ME 0150 Bus. Technology  
ME 0200 Marketing Economics  
ME 0300 Principles of Marketing  
\*ME 0400 Principles of Promotion

#### Hospitality/Tourism Marketing

ME 0150 Business Technology  
ME 0200 Marketing Economics  
ME 0300 Principles of Marketing  
\*ME 0250 Hospitality/Tourism

#### Business Entrepreneurship

ME 0150 Business Technology  
ME 0200 Marketing Economics  
ME 0300 Principles of Marketing  
\*ME 0600 Business Ownership/Entrepreneurship

#### Marketing Management

ME 0150 Business Technology  
ME 0200 Marketing Economics  
ME 0300 Principles of Marketing  
\*ME 0500 Principles of Management

#### Sports and Entertainment Marketing

ME 0150 Business Technology  
ME 0200 Marketing Economics  
ME 0300 Principles of Marketing  
\*ME 0550 Sports and Entertainment Marketing

#### eCommerce/Business to Business

ME 0150 Business Technology  
ME 0200 Marketing Economics  
ME 0300 Principles of Marketing  
\*ME 0328 eCommerce/Business to Business

\* **Capstone courses** for the sequence option - Capstone courses are those in which the Occupational Competency Attainment will be measured. The content of capstone courses will be of an advanced nature. A capstone course must be provided by the Marketing Education Program for continued approval.

It is recommended that all options listed and others determined by the school district and Marketing program should include at least one semester/trimester of ME 0700 Marketing Education Lab or ME 9900 Cooperative Education.

## MARKETING EDUCATION

- ME 0100 (BE 0100) INTRODUCTION TO BUSINESS PROFESSIONS**  
**IBED 0221** Semester/Trimester Prerequisite: none
- Developing career-sustaining skills for business occupations. Emphasis upon career opportunities in business, communication skills, human relations, employment application, general employability skills, and core business skills.
- ME 0150 (BE 0150) BUSINESS TECHNOLOGY**  
**IBED 0223** Semester/Trimester/Year Prerequisite: Keyboarding I
- A one-semester/trimester or year-long course which provides students an introduction to a variety of essential business and marketing competencies. The course includes units of instruction in the following areas: accounting principles, salesmanship, general business principles, marketing/entrepreneurship, business law, human relations skills, public speaking, business communication, keyboarding skill development, computer applications, career awareness, job seeking skills.
- ME 0200 (BE 0200) MARKETING ECONOMICS**  
**IBED 1854** Semester/Trimester Prerequisite: None
- A course which applies decision making in personal and societal affairs in order to satisfy needs and wants with limited resources that have alternative uses. The theories and principles of economics' free enterprise system at work in our society are studied. Meets state graduation requirements for economics.
- ME 0250 (OF 0560) HOSPITALITY/TOURISM**  
**IBED 1872** Semester/Trimester Prerequisite: None
- An introductory course designed to meet the needs of students who seek to enter an exciting, growing field of hospitality/tourism blending communications and human relations skills with technical proficiency.
- ME 0300 (BE 0300) PRINCIPLES OF MARKETING**  
**IBED 1855** Semester/Trimester Prerequisite: None
- A course which develops understanding of the marketing concept, and the business environment and management systems within which it is implemented. Focuses on marketing functions and foundations and their relationship to the competitive enterprise system which controls marketing behavior. Marketing theory is presented and applied to business problems and practices.
- ME 0328 (BE 0328) eCOMMERCE/BUSINESS TO BUSINESS**  
**IBED 1868** Semester/Trimester/Year Prerequisite: Principles of Marketing
- A computerized simulation that introduces students to the principles of business by starting and running their own businesses. This visual business allows students to see how their decisions affect the business. Students then relate what they've seen to more abstract concepts, such as accounting and economics theory.
- ME 0340 (BE 0340) INTRODUCTION TO INTERNATIONAL MARKETING**  
**IBED 1856** Semester/Trimester Prerequisite: Principles of Marketing
- An introductory course designed for students wanting to learn about aspects of international marketing in a "hands on" environment. Topics will include: exporting and importing basics; international economics and finance; international marketing; transportation; laws and regulations; communications; entrepreneurship; trade documentation and employability skills.

ME 0341 (BE 0341) IBED 1857	INTERNATIONAL MARKETING I Semester/Trimester	Prerequisite: Introduction to International Marketing or Permission of the Instructor
A course in which students will discover the global world of Marketing while studying management styles; business/marketing principles, problems and practices; money and banking; organization; foreign culture; credits and investing; and other factors influencing world trade.		
ME 0342 (BE 0342) IBED 1858	INTERNATIONAL MARKETING II Semester/Trimester	Prerequisite: International Marketing I
A course which studies the rapidly increasing area of international business and marketing. This second semester class covers areas related to our economy as well as other countries' economic and trade systems; proper procedures for linking with international business customers; and valuable aspects of becoming a part of this dynamic growing marketplace.		
ME 0350 IBED 1814	RETAIL MERCHANDISING Semester/Trimester	Prerequisite: None
A course which develops an understanding of the basic principles of buying, pricing, visual merchandising and inventory management.		
ME 0400 IBED 1824	PRINCIPALS OF PROMOTION Semester/Trimester	Prerequisite: None
A course which teaches development of customer satisfaction through identifying and analyzing needs and interests - pointing out product benefits and features, advertising, promotion/display, store layout and personal selling.		
ME 0500 IBED 1826	PRINCIPLES OF MANAGEMENT Semester/Trimester	Prerequisite: Marketing Economics, Consumer Economics, or Instructor's Permission
Accomplishing the goals of an organization through the effective use of people and other resources are studied. The functions of management are discussed and analyzed. Role playing, case analysis, guest lecturers and assignments are used to bring together the total management function.		
ME 0550 IBED 1817	SPORTS AND ENTERTAINMENT MARKETING Semester/Trimester	Prerequisite: Marketing Economics, Consumer Economics or Instructor's Permission
A course that teaches students the application of the principles of Marketing in the Sports and Entertainment field. Students will learn the unique aspects of presenting Marketing concepts in a challenging and exciting environment with different and specialized context.		
ME 0600 (BE 0600) IBED 0224	BUSINESS OWNERSHIP/ENTREPRENEURSHIP Semester/Trimester	Prerequisite: Marketing Economics, Consumer Economics, or Instructor's Permission
A course which provides the knowledge, skills and understanding related to the ownership and management of a business. The focus of the course is on the development of a viable business plan related to the student's area of entrepreneurial interest.		
ME 0700 IBED 1825	MARKETING EDUCATION LAB Semester/Trimester	Prerequisite: Concurrent enrollment In another Marketing course
A course which provides students with the opportunity to work in the school store lab and experience the various responsibilities of operating a store, or to participate in and complete marketing projects that allow the student to utilize all the skill and knowledge gained throughout the marketing education program.		

ME 9800  
IBED 1897

**OCCUPATIONAL AND CAREER EXPERIENCE**  
Semester/Trimester

A community based work experience activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objectives of the student. The experiences must be supervised and monitored by the teacher. (Note: This course must be approved on an individual program basis by the State Division.)

ME 9900  
IBED 1898

**COOPERATIVE EDUCATION**  
Semester/Trimester

Community based instruction organized and planned to provide specialized skills unique to an occupation or industry. Students are placed in businesses which provide paid on-the-job experience which is related to the student's primary area of study. The experience must be supervised by the teacher and students must have a training plan.

**ACADEMY OF FINANCE**

(Codes for approved National Academy of Finance programs only)

MT 0100 (BT 0100) **INTRODUCTION TO FINANCIAL SERVICES I & II**  
IBED 0230 One or Two Semesters/Trimesters

This course can be offered either as a one or two-semester course to be given in either the ninth or tenth grade as a means of introducing students to the various sectors of the financial services industry. The objective of this course is to help students learn about both the nature of the careers found in a particular sector and the scope of the work that comprises businesses such as insurance, real estate, public finance, accounting, and the securities industry.

MT 0101 (BT 0101) **STRATEGIES FOR SUCCESS**  
IBED 0222 Semester/Trimester

A course of study which helps to orient students to the world of work and school. Ideally, this course is offered in the ninth and tenth grades as it addresses the needs of students to develop good work and study habits, helps students to prepare portfolios, learn about school resources, develop career plans, start preparing for college and develop solid interpersonal skills, with an emphasis on communication and building self-esteem.

MT 0102 (BT 0102) **BANKING AND CREDIT**  
IBED 0226 Semester/Trimester

A course presenting a survey of the principles and practices of banking and credit in the U.S. Students learn about the major functions of banks and other depository institutions, their in-house operations and procedures, central banking through the Federal Reserve System and modern trends in the banking industry. The credit component provides an overview of credit functions and operations including credit risk evaluation, loan creation and debt collection.

MT 0103 (BT 0103) **FINANCIAL PLANNING/FINANCIAL OPERATIONS**  
IBED 0228 Semester/Trimester

A course that introduces the students to the financial planning process and the components of a comprehensive financial plan. The students learn how to prepare a financial plan that includes saving, investing, borrowing, risk management (insurance), and retirement and estate planning.

MT 0104 (BT 0104) **INTERNATIONAL FINANCE**  
IBED 0229 Semester/Trimester

A course which explores major components of the international financial system. It includes the study of foreign trade, the international monetary system, foreign exchange rates, foreign exchange markets, international financial markets, international banking, and the multinational corporation.

MT 0105 (BT 0105) **ECONOMICS & THE WORLD OF FINANCE**  
IBED 0227 Semester/Trimester

A course covering macro and micro-economics which provides an understanding of how our market economy functions in a global setting. It provides students with a survey of economic concepts including all of the basic principles recommended by the National Council on Economic Education. In addition, a unit on capital markets acquaints the students with the role that various markets and securities play in the U.S. Economy.

BT 0106 (MT 0106) **SECURITIES**  
IBED 0231 Semester/Trimester

A course focusing on the roles and functions of a modern securities organization. Through a study of the structure of brokerage firms, the trading process, credit and margin practices, automated processes, and government regulations, students gain an understanding of how a securities firm services its customers and plays an important role in our economy. Students are given the opportunity to relate their knowledge of economics, accounting, and data processing to the operations areas of various sectors of the securities industry. Emphasis is placed on the skills and attitudes necessary for success in business and college. NOTE: This course may be combined with Insurance, in a course titled "Securities and Insurance".

BT 0107 (MT 0107) **INSURANCE**  
IBED 0232 Semester/Trimester

A course that introduces students to various elements of the insurance industry, including insurance needs and products for businesses and individuals. Students learn about insurance sales, rate-setting, insurance and financial planning, insurance regulations, and careers in the industry. NOTE: this course may be combined with Insurance, in a course titled "Securities and Insurance".

## **ACADEMY OF TRAVEL AND TOURISM**

(Codes for approved National Academy of Travel and Tourism programs only)

MT 0101 (BT 0101) **STRATEGIES FOR SUCCESS**  
IBED 0222 Semester/Trimester

A course of study which helps to orient students to the world of work and school. Ideally, this course is offered in the ninth and tenth grades as it addresses the needs of students to develop good work and study habits, helps students to prepare portfolios, learn about school resources, develop career plans, start preparing for college and develop solid interpersonal skills, with an emphasis on communication and building self-esteem.

MT 0200 **INTRODUCTION TO TRAVEL & TOURISM**  
IBED 1871 Semester/Trimester

A course of study which provides an introduction to the travel and tourism industry. Students are given an overview of the various components of the industry, a history of the industry, an introduction to marketing and to the various exciting careers available in travel & tourism. Students also engage in a case study of their own particular city and study the latest trends which are impacting on the way people travel both for leisure and for business.

MT 0201 **ENGLISH FOR TRAVEL & TOURISM**  
IBED 1875 One Year

A course of study in American literature (selected works are travel related) combined with an emphasis on oral as well as written communication. Students are prepared for the work world through a series of lessons on resume preparation and job-interview techniques.

MT 0202  
IBED 1876

**GEOGRAPHY FOR TRAVEL & TOURISM**  
Semester/Trimester

A course of study which is geared at having students develop broad geographic skills. In addition to learning how to utilize the basic tools of the geographer, students learn how economics, culture, history and political issues all impact upon geography and how geography impacts upon these other disciplines.

MT 0203  
IBED 1877

**TRAVEL & TOURISM II: TRAVEL AS A BUSINESS**  
Semester/Trimester

A course of study which provides students with a more in-depth study of particular components of the travel and tourism industry. Through an examination of the airline, hotel, cruise line and other industries within hospitality and travel, students are able to explore the various career opportunities and trends which are affecting each component of this vast industry.

## TECHNOLOGY EDUCATION

### PROFESSIONAL-TECHNICAL APPROVED COURSES

Grades 9-12

1601	TE 1901	Exploring Technology (9 <sup>th</sup> Grade)
1602	TE 1905	Fundamentals of Technology (9 <sup>th</sup> Grade)

#### Construction

0402	TE 1920	Construction Systems I
0403	TE 1921	Construction Systems II
0424	TE 1922	Introduction to Cabinetry
0429	TE 1923	Advanced Cabinetry

#### Manufacturing

1624	TE 1931	Manufacturing Systems I
1625	TE 1932	Manufacturing Systems II
1627	TE 1933	Introduction to Robotics
1687	TE 1934	Robotics Applications
1681	TE 1935	Mechanical Design Applications
1666	TE 0402	Computer Aided Manufacturing [CAM] Technology

#### P.E.T.

0905	TE 1940	Power, Energy and Transportation Systems I
0906	TE 1941	Power, Energy and Transportation Systems II
1628	TE 1942	Introduction to Laser Technology
1683	TE 1943	Vehicle Design Technology
0461	TE 0501	Introduction to Electronics Technology
0465	TE 0502	Electronics Applications
0921	TE 0801	Aerospace/Flight Technology

#### Communications

1361	TE 1951	Communication Systems I
1362	TE 1952	Communication Systems II
1388	TE 1953	Digital Imaging Technology
1389	TE 1959	Video Editing Technology
0702	TE 0220	Introduction to Drafting/Design Technology
0706	TE 0222	Introduction to Mechanical Drafting/Design
0703	TE 0224	Introduction to Architectural Drafting/Design
0705	TE 0226	Introduction to Electronics Drafting/Design
0704	TE 0228	Introduction to Structural Drafting/Design
1664	TE 0230	Technical Illustration Technology
1312	TE 0240	Graphic Design Technology
0707	TE 0303	Introduction to Computer Aided Drafting/Design

#### Networking\*\* and Related Technologies

1671	TE 0703	Applied Physics I
1672	TE 0704	Applied Physics II
1626	TE 1926	Emerging/Engineering Technology Studies
1685	TE 1928	Biotechnology Studies
3020	TE 1954	Introduction to Information and Communications Technology
3063	TE 1955	Networking Applications**

### Networking\*\* and Related Technologies (continued)

3087	TE 1956	Telecom Applications
3088	TE 1957	Video/Graphic Applications
3075	TE 1958	Web Design (TI 0555)
1661	TE 1971	Principles of Technology I
1662	TE 1972	Principles of Technology II
1697	TE 9800	Occupational and Career Experience

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\*\* Instructors must have the appropriate certification for Information and Communications/Networking

### Pre-Engineering

1630	TE 1501	Principles of Engineering
1631	TE 1502	Introduction to Engineering Design
1632	TE 1503	Digital Electronics
1635	TE 1510	Computer Integrated Manufacturing
1636	TE 1520	Civil Engineering and Architecture
<i>To be assigned</i>	TE 1525	Engineering Design and Development

### OTHER COURSES AND ASSIGNMENTS

<b>0850</b>	<b>PR 0001</b>	<b>Preparation Period</b>
<i>To be assigned</i>	00 0000	No Class or Activity
<i>To be assigned</i>	AC 0017	All other courses/Activities
<i>To be assigned</i>	AC 0019	Other Professional-Technical Courses



## TECHNOLOGY EDUCATION

### Capstone Courses

For Performance Measures and follow-up purposes, a Program Completer is defined as a senior student who, as either a junior or senior, has taken a capstone course.

#### Construction Systems

TE 1920	Construction Systems I
*TE 1921	Construction Systems II
*TE 1923	Advanced Cabinetry

#### Manufacturing Systems

TE 1931	Manufacturing Systems I
	TE 0222 Intro to Mechanical Drafting/Design
*TE 1932	Manufacturing Systems II
	TE 0402 Computer Aided Manufacturing [CAM] Technology
*TE 1934	Robotics Applications

#### Power, Energy and Transportation

TE 1940	Power, Energy and Transportation Systems I
	TE 0801 Aerospace/Flight Technology
*TE 1941	Power, Energy and Transportation Systems II
	TE 0501 Introduction to Electronics Technology
*TE 1943	Vehicle Design Technology
*TE 0502	Electronics Applications

#### Communication Systems

TE 1951	Communication Systems I
	TE 0220 Intro to Drafting/Design Technology
	TE 0224 Intro to Architectural Drafting/Design
	TE 0226 Intro to Electronic Drafting/Design
	TE 0228 Intro to Structural Drafting/Design
*TE 1952	Communication Systems II
	*TE 0230 Technical Illustration Technology
	*TE 0240 Graphic Design Technology
	*TE 0303 Introduction to Computer Aided Drafting/Design
*TE 1959	Video Editing Technology

#### Applied Physics

TE 0703	Applied Physics I
*TE 0704	Applied Physics II

#### Emerging/Engineering Technology

*TE 1926	Emerging/Engineering Technology Studies
*TE 1928	Biotechnology Studies

#### Networking & Related Technologies

TE 1954	Intro. to Information & Communications Technology
*TE 1955	Information/Communications Technology – Networking Applications
TE 1956	Information/Communications Technology – Telecom Applications
TE 1957	Information/Communications Technology – Video/Graphic Applications

#### Principles of Technology

TE 1971	Principles of Technology I
*TE 1972	Principles of Technology II

#### Pre-Engineering

TE 1501	Principles of Engineering
TE 1502	Introduction to Engineering Design
TE 1503	Digital Electronics
TE 1510	Computer Integrated Manufacturing
TE 1520	Civil Engineering and Architecture
*TE 1525	Engineering Design and Development

#### Internship/Occupational Career Experience

TE 9800	Occupational and Career Experience
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\* Capstone Courses for the sequence option - Capstone courses are those in which the Occupational Competency Attainment will be measured. The content of capstone courses will be of an advanced nature.

## TECHNOLOGY EDUCATION

TE 1901 IBED 1601	<b>EXPLORING TECHNOLOGY</b> Semester/Trimester (One semester/trimester minimum)
	<p>A course designed to introduce students to basic technological principles, processes, and skills such as design and problem solving, team decision making, information gathering, and safety. A systems model of communication, manufacturing, power/energy and transportation and construction is presented. Students are exposed to sketching, technical drawing, screen printing, logo and poster development, building of model rockets and bridges, experimentation with computer-assisted graphics, computer-aided design software, electronic devices, and video production. The course is designed to develop an appreciation of technical fields and occupations while learning about skills essential to these systems.</p>
TE 1905 IBED 1602	<b>FUNDAMENTALS OF TECHNOLOGY</b> Semester/Trimester (One semester/trimester minimum)
	<p>Fundamentals of Technology is a prerequisite course for most of the Technology Education systems. Communication skills and tools are the major focus of this course. These same skills are central to all subsequent technology courses. The computer and other electronic devices are necessary for teaching an understanding of contemporary communications, manufacturing, power/energy/transportation and construction systems. An engineering focus of problem solving requires students to define a given problem, conduct appropriate research, develop solutions to the problem, construct prototypes, and evaluate their work.</p> <p>This course is designed to introduce students to those principles and skills used in subsequent technology courses. Students learn to sketch solutions to problems, create technical drawings and presentations, build models, and apply creative problem solving methods. Emphasis is placed on accessing and communicating information, using simple and complex tools in a safe manner, and increasing the students' awareness of the historical and contemporary implications of technology. Students are introduced to computer-aided graphics, design software, and computer-aided manufacturing. Students develop an understanding of the tools, techniques, and processes of technology using design principles, computers, problem solving and model making.</p>
TE 0220 IBED 0702	<b>INTRODUCTION TO DRAFTING/DESIGN TECHNOLOGY</b> Semester/Trimester (One semester/trimester minimum)
	<p>An entry level course in Communications Systems which addresses the concepts needed to transfer ideas into easily understood graphic languages, designs or drawings. The use of drawing tools, including mechanical devices and computer software, are essential for student studies. Each of the major areas of drafting and design should be explored on an introductory level.</p>
TE 0222 IBED 0706	<b>INTRODUCTION TO MECHANICAL DRAFTING/DESIGN</b> Semester/Trimester (One semester/trimester minimum)
	<p>A course in Manufacturing Systems designed to develop students' basic entry level skills in the development of multi-view and pictorial drawings. Instruction includes work on detailed drawings, gears and cams, sectioning, threads/fasteners and piping. ANSI standards will be incorporated into each assignment. Training must include the use of computer applications.</p>
TE 0224 IBED 0703	<b>INTRODUCTION TO ARCHITECTURAL DRAFTING/DESIGN</b> Semester/Trimester (One semester/trimester minimum)
	<p>An entry level course in Communications Systems designed to prepare students with basic skills that support the fields of architectural development. Architectural drawings include assignment that relate to residential, light commercial, marine and aerospace-related structures. Training must include the use of computer applications.</p>
TE 0226	<b>INTRODUCTION TO ELECTRONIC DRAFTING/DESIGN</b>

IBED 0705	Semester/Trimester	(One semester/trimester minimum)
An entry level course in Communications Systems designed to prepare students with skills in drawing and designing electronic circuits, schematic diagrams for series and parallel circuits. Assignments should encourage the actual development of the circuit upon completing the drawing. Training must include the use of computer applications.		
TE 0228 IBED 0704	INTRODUCTION TO STRUCTURAL DRAFTING/DESIGN Semester/Trimester	(One semester/trimester minimum)
An entry level course in Communications Systems covering the basic areas of civil, structural and aerospace engineering. Students will develop plans which include the application of wood, steel, concrete and composite materials. Assignments will include drawings and model development of roads, bridges, towers, marine structures, piping systems, trusses and aerospace structures. Compiling a bill of material, completing a structural analysis and using computer applications are viable components of this course.		
TE 0230 IBED 1664	TECHNICAL ILLUSTRATION TECHNOLOGY Semester/Trimester	(One semester/trimester minimum)
An entry level course in Communications Systems in which students will explore and develop basic skills in shading/rendering, water color applications, overlays, airbrush techniques and computer design. Student work will involve renderings in mechanical, architectural, structural and aerospace-related objects and structures. Assignments should be of display/presentation quality.		
TE 0240 IBED 1312	GRAPHIC DESIGN TECHNOLOGY Semester/Trimester	(One semester/trimester minimum)
An entry level course in Communications Systems that explores modern graphic techniques and the basic skills needed for graphic printing. The use of electronic devices and computers to help in the production of graphic materials is a main component. Student assignments will also include the basic operations used in graphic layouts and offset press work.		
TE 0303 IBED 0707	INTRODUCTION TO COMPUTER AIDED DRAFTING/DESIGN Two Semesters/Trimester	Prerequisite: Introduction to Drafting Technology
An entry level course in Communications Systems designed to provide students with an understanding of the operation and features of a current industrial computer aided drafting/design (CADD) system. Emphasis is placed on the application of computer software in solving basic architectural, structural, electronic or mechanical drafting problems. The purpose of the course is to assist individuals in making meaningful occupational and educational choices. Basic technical information and laboratory experiences directly related to the operation and application of computer software is provided in a hands-on approach. This course is selected by a district in lieu of the series of Introductory courses TE 0220-TE 0228.		
TE 0402 IBED 1666	COMPUTER AIDED MANUFACTURING [CAM] TECHNOLOGY Semester/Trimester	(One semester/trimester minimum)
This course in Manufacturing Systems explores the role of computers and automation in the technological age. Students enrolled in Computer Aided Manufacturing [CAM] will study the major manufacturing applications of the computer, numerical control, computerized numerical control, computer interface and flexible manufacturing systems. Activities in Robotics and Computer Instructed Manufacturing [CIM] will be introduced in this course.		
TE 0501 IBED 0461	INTRODUCTION TO ELECTRONICS TECHNOLOGY Semester/Trimester	(One semester/trimester minimum)
An entry level course in Power, Energy and Transportation Systems which provides critical information about the vast number of Electrical/Electronic Technological applications important to daily living. Primary instruction will center around the major Laws of electronics with simple circuits and electronic components found in industrial and consumer equipment and appliances. Introduction		

to Electronics Technology provides the flexibility for many laboratory activities that reflect the technical and social nature of our modern society.

TE 0502  
IBED 0465

## ELECTRONICS APPLICATIONS

Semester/Trimester

(Highly recommended for one full year/ 2 trimesters)

This is an advanced level course in electronics that covers theory and application of electronic principles and practices. Students will be expected to design, build and troubleshoot circuits and electronic components. This course will serve as the first level course for Engineering and Intestinal Systems programs. Significant laboratory time is required to offer the students the skills necessary to complete advanced level assignments on working models and training devices.

TE 0703  
IBED 1671

## APPLIED PHYSICS I

Semester/Trimester

(One full year/2 trimesters)

This course is the same course as Principles of Technology with the exception that the instructor has a Secondary endorsement in Science. With state approval, this course qualifies for Science credit.

TE 0704  
IBED 1672

## APPLIED PHYSICS II

Semester/Trimester

(One full year/2 trimesters)

This course is the same as Principles of Technology II, with the exception that the instructor has a Secondary endorsement in Science. With state approval, this course qualifies for Science credit.

TE 0801  
IBED 0921

## AEROSPACE/FLIGHT TECHNOLOGY

Semester/Trimester

(One semester/trimester minimum)

This course in Power, Energy and Transportation Systems creates a learning environment which allows students to assimilate knowledge from various school subjects and apply them to the study of movement of vehicles involved in various flight applications. Instruction in design, testing, and construction of aircraft vehicles, including wind tunnel, power and non-power flight is provided, including rocketry. Additional activities may include planning, designing and preparation for a simulated space flight and live-in mission. While living in the habitat, students will conduct several space/earth-related experiments. One of the main thrusts of this course is to encourage a multi-disciplinary approach to education.

TE 1920  
IBED 0402

## CONSTRUCTION SYSTEMS I

Semester/Trimester

Prerequisite: Fundamentals of Technology

Construction Systems I is a comprehensive course involving a multitude of applications in the construction field and is designed for a broad approach to the field of study. Some schools may choose to offer this course in lieu of specific topic courses such as TE 1922 or TE 1923. The course is designed to introduce classical and contemporary elements, principles and processes of structural systems. Architectural and engineering subjects are studied through research, design, project development and assessment. Students explore the relationship of materials, form, function, and culture of notable past and present structures through practical applications and modeling techniques.

TE 1921  
IBED 0403

## CONSTRUCTION SYSTEMS II

Semester/Trimester

Prerequisites: Fundamentals of Technology  
and Construction Systems I

Construction Systems II is a comprehensive course involving a multitude of applications in the construction fields and is designed for a broad approach to the field of study. Some schools may choose to offer this course in lieu of specific topic courses such as TE 1922 or TE 1923. Students of Construction Systems II continue their study of structural systems through research, developing solutions, creating designs, building models and critiquing their work. Working individually and as team members, students apply the skills and insights from the previous course to pursue progressively demanding concepts and relationships of structural systems. Advanced level students are given greater freedom to explore individual topics of interest within the area of structural systems.

TE 1922

## INTRODUCTION TO CABINETRY

IBED 0424

Semester/Trimester

This course is provided as a base level for students interested in careers in construction but more specifically for finish carpentry. Students will be given opportunities to build basic cabinet style models and learn finishing and staining techniques. Projects developed in this class may be craft related and are usually designed so that students learn how to properly use the equipment commonly found in commercial cabinetmaking businesses.

TE 1923

IBED 0429

ADVANCED CABINETRY

Full Year/ 2 Trimester

Prerequisites: Introduction to Cabinetry

Students taking this course are exposed to advanced woodworking applications and specialized equipment commonly found in industrial shops. Tables, curios, desks, and residential furnishings will be constructed. Specialized finishing techniques will be taught with emphasis on accuracy and detail of the finished product. Design, function, and durability of the product will be established as outcomes for the course.

TE 1926

IBED 1626

EMERGING/ENGINEERING TECHNOLOGY STUDIES

Semester/Trimester

Prerequisite: Fundamentals of Technology

This course provides an opportunity for students to research and experiment with a technology-related topic of their choice. Students may be offered the opportunity to take this course as a directed study. Topics may be chosen using the knowledge, skills and insights gained from previous Technology courses, or from the latest information available in professional journals, Web sites, or professionals in the field. Students work on an individual or small group project under the guidance of a technology teacher with input and involvement from other Professional-Technical and/or academic teachers and adult mentors. Students investigate technological concepts and apply the tools of technology to better understand other fields of study. The topic of study must be approved by the teacher in accordance with local established guidelines and criteria. Examples of projects might include: extensive research on lasers, fiber optics; biotechnology experiments; production of a multimedia project dealing with an important social issue related to technology; an original technology-related multimedia production.

TE 1928

IBED 1685

BIOTECHNOLOGY STUDIES

Semester/Trimester

Advanced level instruction into the historical, societal and environmental impacts of scientific study in the field of biotechnology is provided to students in this course. Students will undertake basic experiments in plant and growing materials and will study the cause and effect of biotechnological discoveries and applications. Studies of human industrial applications of microbes and other biology related materials will comprise the majority of the instruction in this course. Opportunities for cross discipline instruction are encouraged. Instructors with the appropriate certification may offer this course for science credit as approved by the district.

TE 1931

IBED 1624

MANUFACTURING SYSTEMS I

Semester/Trimester

Prerequisite: Fundamentals of Technology

Manufacturing Systems I is a comprehensive course involving a multitude of applications in the manufacturing fields and is designed for a broad approach to the field of study. Some schools may choose to offer this course in lieu of specific topic courses such as TE 1934 or TE 1935. A course designed for students to study general concepts and principles of manufacturing systems. Working individually and in teams, students design products, develop and conduct market surveys, develop financial and personnel strategies, advertise, market, and produce products using contemporary manufacturing methods. The course is designed for students interested in product design, creative problem solving, creation of prototypes, computer-assisted design and manufacturing, basic entrepreneurial skills, and engineering concepts. (Concepts covered in TE 0222 are provided in this course, along with basic manufacturing practices)

TE 1932

MANUFACTURING SYSTEMS II

IBED 1625

Full year/2 Trimesters

Prerequisite: Fundamentals of Technology  
and Manufacturing Systems I

Manufacturing Systems II is a comprehensive course involving a multitude of applications in the manufacturing fields and is designed for a broad approach to the field of study. Some schools may choose to offer this course in lieu of specific topic courses such as TE 1934 or TE 1935. Manufacturing Systems II continues to build on the knowledge and skills gained from Manufacturing Systems I. Students pursue more detailed and integrated manufacturing and production projects and will study and design manufacturing systems. Students continue to use creative problem solving skills, design tools and processes, and apply manufacturing techniques with increasing sophistication. Projects are designed and produced using computer-assisted manufacturing applications, computer numerically-controlled machines and robotics. This course has been developed for students pursuing careers in manufacturing as a designer, drafter, industrial manager, technician or engineer. (Includes instruction offered in TE 0402)

TE 1933

IBED 1627

## INTRODUCTION TO ROBOTICS

Semester/Trimester

This is an introductory course in the design, use and technology of robots commonly found in industrial and consumer applications. Students will design model robots using mechanical devices and explore computer controlled applications. Applications of specialized materials and composites will be studied to determine structural and durability characteristics. Electronic components and electro-mechanical devices will be studied and used in model development. Basic programming languages will be introduced.

TE 1934

IBED 1687

## ROBOTICS APPLICATIONS

Semester/Trimester

Prerequisites: Introduction to Robotics

Advanced level design and applications of robots in industrial and consumer markets will be explored. Students will design multi-level robotic applications for use in manufacturing, transportation, storage and handling, chemical, biological and other industrial areas. Sophisticated electronics circuitry and advanced type materials and composites will be used in the design and construction of working models. Student will program industrial-type robots and design manufacturing models that will distinguish between materials, shapes, quality, and other characteristics of products to be sorted and stored. Transportation models and consumer robots may be designed and studied as an alternative to manufacturing applications.

TE 1935

IBED 1681

## MECHANICAL DESIGN APPLICATIONS

Semester/Trimester

This course may be offered in addition to or instead of the Robotics Applications course to provide students with an understanding and working knowledge of mechanical devices used in industrial applications. These devices may be structures designed for transportation such as bridges, hoists, repair equipment and tools, or in any industrial areas where mechanical devices are used to reduce the workload of humans. These devices may be pneumatic, hydraulic, electro-mechanical or strictly mechanical in nature. Students will be given the opportunity to design and build mechanical devices and to study the materials used in such devices, equipment and tools. They will also study the processes used to manufacture mechanical devices and conduct research on the effectiveness and efficiency of mechanical devices.

TE 1940

IBED 0905

## POWER/ENERGY AND TRANSPORTATION SYSTEMS I

Semester/Trimester

Prerequisite: Fundamentals of Technology

Power/Energy and Transportation Systems I is a comprehensive course involving a multitude of applications in the transportation, power and energy fields and is designed for a broad approach to the field of study. Some schools may choose to offer this course in lieu of specific topic courses such as TE 1943, TE 0801, etc. Students enrolled in this course will explore sources, storage, transportation, consumption, control, environmental impacts, and conservation of power, energy and transportation. Land, ground effects, water, air, space and inter-modal transportation systems will be explored with practical activities emphasizing relevant scientific and engineering concepts. Activities include defining problems, designing prototypes, using computer-assisted applications,

constructing models, and testing prototypes using appropriate tools such as wind tunnels and performance tests.

TE 1941  
IBED 0906

## POWER/ENERGY AND TRANSPORTATION SYSTEMS II

Semester/Trimester

Prerequisites: Fundamentals of Technology and  
Power/Energy and Transportation Systems I

Power/Energy and Transportation Systems II is an advanced level comprehensive course involving a multitude of applications in the transportation, power and energy fields and is designed for a broad approach to the field of study. Some schools may choose to offer this course in lieu of specific topic courses such as TE 1943, TE 0801, etc.. Students will continue to build on their knowledge of transportation systems by experimenting with increasingly complex systems and concepts. Guidance, inter-modal and urban transportation systems are explored. Students continue to seek solutions to problems through research and design, prototype development and experimentation. Students perform technological assessments on transportation topics of interest.

TE 1942  
IBED 1628

## INTRODUCTION TO LASER TECHNOLOGY

Semester/Trimester

This course is offered to provide students with the opportunity to study the development, design and use of lasers in commercial and consumer applications. Basic study in optics and light sources is provided. Students will build simple laser applications and study the effects of laser technology. Security applications, audio and video adaptations and other applications of laser technology will be researched to determine the cultural, economic, and industrial impact of the technology.

TE 1943  
IBED 1683

## VEHICLE DESIGN TECHNOLOGY

Semester/Trimester

Prerequisites: P.E.T. Systems I, Manufacturing  
Systems I, or Drafting/Design courses

Vehicle design technology will cover all aspects of alternative and common transportation devices and applications. Students will study, research, design and build vehicles using various forms of energy from solar and electricity to magnetic levitation. Course emphasis will be placed on the design and construction of a model as a team approach. Research in alternative energy design and applications will provide students with a sound understanding of environmental issues and non-replaceable fuel substitutes. Efficiency of design and practical use of the model will be emphasized.

TE 1951  
IBED 1361

## COMMUNICATION SYSTEMS I

Semester/Trimester

Prerequisite: Fundamentals of Technology

Communication Systems I is a comprehensive course involving a multitude of applications in the energy and transportation fields and is designed for a broad approach to the field of study. Some schools may choose to offer this course in lieu of specific topic courses such as TE 0222 or TE 1954. This is a course designed to develop an understanding of contemporary communication principles and devices. Students develop graphic and electronic communication projects through the use of various media. Activities typically include engineering and technical concepts of sketching, drafting, screen printing, computer-assisted graphics, technical presentations, photography, audio and video production. Students learn to apply the elements of good design to communication products.

TE 1952  
IBED 1362

## COMMUNICATION SYSTEMS II

Semester/Trimester II

Prerequisite: Fundamentals of Technology  
and Communication Systems I

Communication Systems II is a comprehensive course involving a multitude of applications in the energy and transportation fields and is designed for a broad approach to the field of study. Some schools may choose to offer this course in lieu of specific topic courses such as TE 0222 or TE 1954. Communication Systems II uses the skills and insights gained from Communication Systems I. Students develop detailed and integrated communication projects and concepts. Students produce a variety of technical presentations using telecommunications, computer applications, graphics, and photography. This course is designed for students planning to enter business, education, marketing, sales, and advertising or planning to major in science, engineering, or technical fields related to communications.

TE 1953  
IBED 1388

DIGITAL IMAGING TECHNOLOGY  
Semester/Trimester

This course is offered to students who wish to pursue careers in the field of photography and computer graphics. Studies will include the design and manipulation of images to develop communications media and productions. Still and motion images will be developed, printed, copied, edited and/or projected in a studio environment or presentation format. Emphasis will be placed on industrial applications of digital imagery.

TE 1959  
IBED 1389

VIDEO EDITING TECHNOLOGY  
Semester/Trimester

This course is offered to students who wish to pursue careers in the broadcast industry and related telecommunications fields. Students will be required to make videos and edit the material to make a comprehensive presentation on specific topics. Common tape formats and digital applications will be studied with specific emphasis on commercial applications. The course may involve preparing video for sporting events, drama, and closed circuit television broadcasts. Story boarding and script development are integral components of the course.

TE 1954  
IBED 3020

INTRODUCTION TO INFORMATION AND COMMUNICATIONS TECHNOLOGY  
One Year

Prerequisite: None

This course provides the basic understanding of a computer networking system and the operations and maintenance procedures of the related components. It is understood that students enrolling in this course should have basic computer literacy. The course is the foundation for the Idaho Networking Technology program and is a prerequisite course for advanced level instruction. The course is typically a semester in length.

TE 1955  
IBED 3063

NETWORKING APPLICATIONS  
One Semester

Prerequisite: Intro to Information and Communications Technology

This course provides students the opportunity to become familiar with the hardware and software knowledge required to function as a network technician. It is a basic course leading to the advanced levels of certification. Students will learn the skills necessary to prepare them to take initial certification tests. This is either a year long or semester length course. Alternative course work that would replace this course is A+. It is suggested that TI 0551 be a prerequisite to advanced level instruction.

TE 1956  
IBED 3087

TELECOM APPLICATIONS  
One Semester

Prerequisite: Intro to Information and Communications Technology

A course which provides the student with a basic understanding of telecommunications and the equipment necessary for distant communication networks. Students will explore various methods of communications using microwave, satellite, closed circuit, and other applications. Community and industrial sites will serve as training locations in addition to the district applications. Video setup, sound, camera and monitor needs, text and data requirements, and educational applications will be studied. Students will analyze and design systems and install and maintain equipment in the district and in community or industry sites.

TE 1957  
IBED 3088

VIDEO/GRAPHICS APPLICATIONS  
One Semester

Prerequisite: Intro to Information and Communications Technology

A course providing students with the basic understanding of video and graphic technology to include video taping, sound and graphic design, recording and production requirements, and digital applications. Students will install, maintain, set up and operate various video, sound and computerized equipment as found in a production studio. Graphics development for design, layout, and production of video, television, telecommunication, or printing applications will be studied in



district and community sites.

TE 1958 (TI 0555)  
IBED 3075

## WEB DESIGN

This course will provide a framework for best practices in web design. Students will learn the nature of usable websites, designing for aesthetic appeal, performing usability studies, information architecture, designing for accessibility, and technical issues. Adobe or Macromedia Suites are usual offerings.

TE 1971  
IBED 1661

## PRINCIPLES OF TECHNOLOGY I Semester/Trimester

(One full year/2 trimesters)

A course designed to provide the student with an understanding of the principles and concepts of technology and the mathematics associated with them through hands-on experimentation. Technical instruction on force, work, rate, resistance, energy, and power provides students with an understanding of essential concepts found in science and technology. Abstract concepts and models are stressed through student experimentation and observation. Especially designed for students planning technical, engineering, or science related careers.

TE 1972  
IBED 1662

## PRINCIPLES OF TECHNOLOGY II Semester/Trimester

Prerequisite: Principles of Technology I  
(One full year/2 trimesters)

Principles of Technology II is a continuation of the first level. It provides instruction and experimentation with force, transformers, momentum, waves and vibrations, energy converters, transducers, radiation theory, optical systems and time constants. Students continue their hands-on activities with increasingly complex phenomena.

TE 9800  
IBED 1697

## OCCUPATIONAL AND CAREER EXPERIENCE Semester/Trimester

A community based work experience activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objectives of the student. The experiences must be supervised and monitored by the teacher. (Note: This course must be approved on an individual program basis by the State Division.)

# PRE- ENGINEERING

TE 1501  
IBED 1630

## PRINCIPALS OF ENGINEERING Semester/Trimester

A course that helps students understand the field of engineering/engineering technology. Exploring various technology systems and manufacturing processes helps students learn how engineers and technicians use math, science and technology in an engineering problem solving process to benefit people. The course also includes concerns about social and political consequences of technological change.

TE 1502  
IBED 1631

## INTRODUCTION TO ENGINEERING DESIGN Semester/Trimester

A course that teaches problem-solving skills using a design development process. Models of product solutions are created, analyzed and communicated using solid modeling computer design software.

TE 1503  
IBED 1632

## DIGITAL ELECTRONICS Semester/Trimester

A course in applied logic that encompasses the application of electronic circuits and devices. Computer simulation software is used to design and test digital circuitry prior to the actual construction of circuits and devices.

TE 1510  
IBED 1635

**COMPUTER INTEGRATED MANUFACTURING**  
Semester/Trimester

A course that applies principles of robotics and automation. The course builds on computer solid modeling skills developed in Introduction to Engineering Design. Students use CNC equipment to produce actual models of their three-dimensional designs. Fundamental concepts of robotics used in automated manufacturing, and design analysis are included.

TE 1520  
IBED 1636

**CIVIL ENGINEERING AND ARCHITECTURE**  
Semester/Trimester

This course provides an overview of the fields of Civil Engineering and Architecture, while emphasizing the interrelationship and dependence of both fields on each other. Students use state of the art software to solve real world problems and communicate solutions to hands-on projects and activities. The course covers topics such as: the roles of Civil Engineers and Architects; project planning; site planning; building design; project documentation; and, presentation.

TE 1525  
IBED *To be assigned*

**ENGINEERING DESIGN AND DEVELOPMENT**  
Semester/Trimester

An engineering research course in which students work in teams to research, design and construct a solution to an open-ended engineering problem. Students apply principles developed in the four preceding courses and are guided by a community mentor. They must present progress reports, submit a final written report and defend their solutions to a panel of outside reviewers at the end of the school year.

## Engineering and Industrial Systems

### PROFESSIONAL-TECHNICAL APPROVED COURSES

IBEDS

#### Transportation Trades Cluster

0911	TI 0200	Fundamentals of Mechanical Technology
0922	TI 0922	Introduction to Aviation Careers
0923	TI 0923	Intermediate Aviation Technologies
0924	TI 0924	Advanced Aviation Technologies
0997	TI 9892	Occupational & Career Experience – Aviation Technologies
0934	TI 1201	Small Engine Repair Level I
0935	TI 1202	Small Engine Repair Level II
0936	TI 1203	Small Engine Repair Level III
0997	TI 9812	Occupational & Career Experience – Small Engine Repair
0998	TI 9900	Transportation Trades Co-Op
0941	TI 0101	Auto Body (Collision Repair) Technology Level I
0942	TI 0102	Auto Body (Collision Repair) Technology Level II
0943	TI 0103	Auto Body (Collision Repair) Technology Level III
0997	TI 9801	Occupational & Career Experience – Auto Body Technology
0998	TI 9900	Transportation Trades Co-Op
0945	TI 0201	Automotive Technology Level I
0946	TI 0202	Automotive Technology Level II
0947	TI 0203	Automotive Technology Level III
0997	TI 9802	Occupational & Career Experience – Automotive Technology
0998	TI 9900	Transportation Trades Co-Op
0950	TI 0601	Heavy Equipment/Diesel Level I
0951	TI 0602	Heavy Equipment/Diesel Level II
0952	TI 0603	Heavy Equipment/Diesel Level III
0997	TI 9806	Occupational & Career Experience – Heavy Equipment/Diesel
0998	TI 9900	Transportation Trades Co-Op
2431	TI 0801	Industrial Mechanics Level I
2432	TI 0802	Industrial Mechanics Level II
2433	TI 0803	Industrial Mechanics Level III
2497	TI 9808	Occupational & Career Experience – Industrial Mechanics
0998	TI 9900	Transportation Trades Co-Op

#### Architectural and Design Cluster

0414	TI 1101	Residential Carpentry/Building Construction Level I
0415	TI 1102	Residential Carpentry/Building Construction Level II
0416	TI 1103	Residential Carpentry/Building Construction Level III
0497	TI 9811	Occupational & Career Experience – Residential Carpentry/Building Construction
0498	TI 9900	Construction Trades Co-Op
0425	TI 0401	Cabinetmaking and Millwork Level I
0426	TI 0402	Cabinetmaking and Millwork Level II
0427	TI 0403	Cabinetmaking and Millwork Level III
0497	TI 9804	Occupational & Career Experience – Cabinetmaking/Millwork
0498	TI 9900	Construction Trades Co-Op
0721	TI 0301	Architectural Drafting Level I
0722	TI 0302	Architectural Drafting Level II
0723	TI 0303	Architectural Drafting Level III
0797	TI 9803	Occupational & Career Experience – Architectural Drafting
0798	TI 9900	Drafting Occupations Co-Op
0731	TI 0901	Mechanical Drafting Level I
0732	TI 0902	Mechanical Drafting Level II
0733	TI 0903	Mechanical Drafting Level III
0797	TI 9809	Occupational & Career Experience – Mechanical Drafting
0798	TI 9900	Drafting Occupations Co-Op

## Engineering and Manufacturing Cluster

0462	TI 0501	Basic Electronics Technology
0463	TI 0502	Intermediate Electronics Technology
0464	TI 0503	Advanced Electronics Technology
0497	TI 9805	Electronic Technology Work Experience/Internship
2403	TI 1001	Precision Machining/Automated Manufacturing Level I
2405	TI 1002	Precision Machining/Automated Manufacturing Level II
2406	TI 1003	Precision Machining/Automated Manufacturing Level III
2497	TI 9810	Occupational & Career Experience – Precision Machining/Automated Manufacturing
2421	TI 1401	Welding Level I
2422	TI 1402	Welding Level II
2423	TI 1403	Welding Level III
2424	TI 1404	Introduction to Metal Fabrication
2425	TI 1405	Intermediate Metal Fabrication and Design
2426	TI 1406	Advanced Metal Fabrication
2497	TI 9814	Occupational & Career Experience – Welding

## Information System Technologies Cluster

3020	TI 0550	Introduction to Information Technologies
3063	TI 0551	Computer Support Essentials
3087	TI 0552	Internet Technologies – iNet+
3088	TI 0553	Digital Video
3095	TI 0554	Digital Media
3075	TI 0555	Web Design (TE 1958)
3046	TI 0557	Programming Fundamentals
3076	TI 0558	Intermediate Programming
3069	TI 0559	Database Design Fundamentals
3097	TI 9855	Occupational & Career Experience – Information and Communications Technology
3061	TI 0600	Network Basics
3067	TI 0604	Network Operating Systems
3066	TI 0605	Interactive Media
3065	TI 0606	3D Animation & Visualization
3064	TI 0607	Network Administration
3068	TI 0608	Computer Graphics and Design
3062	TI 0609	Internetworking Techniques
3072	TI 0611	Internship – Network and Computer Support
3098	TI 9855	Comprehensive IT Media Project

## Media Technologies Cluster

### Graphics Communications

1311	TI 0700	Media Technologies Fundamentals
1313	TI 0701	Graphics Assistant
1314	TI 0702	Pre-Press Publications Technician
1315	TI 0703	Graphics Communications Technician
1397	TI 9807	Occupational & Career Experience – Media Technologies

### Journalism

1311	TI 0700	Media Technologies Fundamentals
1341	TI 0710	Journalism Technology A
1342	TI 0711	Journalism Technology B
1344	TI 0712	Journalism Production - Yearbook
1345	TI 0713	Journalism Production – Newspaper
1346	TI 0714	Photo Journalism
1347	TI 0715	Broadcast Journalism
1397	TI 9807	Occupational & Career Experience – Media Technologies

## Media Technologies (continued)

		<b>Commercial Photography</b>
1311	TI 0700	Media Technologies Fundamentals
1333	TI 1601	Photography Assistant
1334	TI 1602	Studio Assistant/Technician
1335	TI 1603	Photographic Technician
1397	TI 9807	Occupational & Career Experience – Media Technologies

		<b>Broadcast Technologies</b>
1311	TI 0700	Media Technologies Fundamentals
1351	TI 1701	Broadcast Assistant
1352	TI 1702	Studio Assistant
1353	TI 1703	Broadcast Technician
1397	TI 9807	Occupational & Career Experience – Media Technologies

### **Public Service and Environmental Cluster**

0651	TI 1501	Introduction to Cosmetology
0652	TI 1502	Intermediate Cosmetology
0653	TI 1503	Advanced Cosmetology
0697	TI 9815	Occupational & Career Experience – Cosmetology
2565	TI 1801	Introduction to Law Enforcement
2566	TI 1802	Intermediate Law Enforcement Practices
2567	TI 1803	Advanced Law Enforcement
2568	TI 9818	Occupational and Career Experience – Law Enforcement/Criminal Justice
0185	TI 1901	Introduction to Environmental Science Technology
0186	TI 1902	Environmental Science Technology Applications
0187	TI 1903	Advanced Environmental Applications/Internships
0197	TI 9819	Occupational & Career Experience – Environmental Science Technology
0198	TI 9900	Cooperative Education

### **OTHER COURSES AND ASSIGNMENTS**

<b>0850</b>	<b>PR 0001</b>	<b>Preparation Period</b>
<i>To be assigned</i>	00 0000	No Class or Activity
<i>To be assigned</i>	AC 0017	All other courses/Activities
<i>To be assigned</i>	AC 0019	Other Professional-Technical Courses

## Engineering and Industrial Systems Capstone Courses

For Performance Measures and follow-up purposes, a Program Completer is defined as a **senior** student who, as either a junior or senior, has taken a capstone course.

### Autobody (Collision Repair) Technology

- TI 0101 Auto Body (Collision Repair) Technology Level I
- TI 0102 Auto Body (Collision Repair) Technology Level II
- \*TI 0103 Auto Body (Collision Repair) Technology Level III
- \*TI 9801 Occupational & Career Experience - Auto Body Technology

### Automotive Technology

- TI 0201 Automotive Technology Level I
- TI 0202 Automotive Technology Level II
- \*TI 0203 Automotive Technology Level III
- \*TI 9802 Occupational & Career Experience - Automotive Technology

### Architectural Drafting

- TI 0301 Architectural Drafting Level I
- TI 0302 Architectural Drafting Level II
- \*TI 0303 Architectural Drafting Level III
- \*TI 9803 Occupational & Career Experience - Architectural Drafting

### Cabinetmaking/Millwork

- TI 0401 Cabinetmaking and Millwork Level I
- TI 0402 Cabinetmaking and Millwork Level II

### Electronic Technology

- TI 0501 Basic Electronics Technology
- TI 0502 Intermediate Electronics Technology
- \*TI 0503 Advanced Electronics Technology
- \*TI 9805 Electronic Technology Work Experience/ Internship

### Information System Technologies

- TI 0550 Introduction to Information Technologies
- TI 0551 Computer Support Essentials
- TI 0552 Internet Technologies – iNet+
- TI 0553 Digital Video
- \*TI 0554 Digital Media
- TI 0555 Web Design
- TI 0557 Programming Fundamentals
- TI 0558 Intermediate Programming
- \*TI 0559 Database Design Fundamentals
- TI 0600 Network Basics
- \*TI 0604 Network Operating Systems
- \*TI 0605 Interactive Media
- \*TI 0606 3D Animation & Visualization
- \*TI 0607 Network Administration
- \*TI 0608 Computer Graphics and Design
- \*TI 0609 Internetworking Techniques
- \*TI 0611 Internship – Network and Computer Support
- \*TI 9855 Comprehensive IT Media Project

### Heavy Equipment/Diesel

- TI 0601 Heavy Equipment/Diesel Level I
- TI 0602 Heavy Equipment/Diesel Level II
- \*TI 0603 Heavy Equipment/Diesel Level III
- \*TI 9806 Occupational & Career Experience - Heavy Equipment/Diesel

### Graphics Communications

- TI 0700 Media Technologies Fundamentals
- TI 0701 Graphics Assistant
- TI 0702 Pre Press/Production Technician
- \*TI 0703 Graphic Communications Technician
- \*TI 9807 Occupational & Career Experience – Media Technologies

\* **Capstone Courses** for the sequence option - Capstone courses are those in which the Occupational Competency Attainment will be measured. The content of capstone courses will be of an advanced nature.

## Journalism

TI 0700	Media Technologies Fundamentals
TI 0710	Journalism Technology A
TI 0711	Journalism Technology B
*TI 0712	Journalism Production - Yearbook
*TI 0713	Journalism Production - Newspaper
*TI 0714	Photo Journalism
*TI 0715	Broadcast Journalism
*TI 9807	Occupational & Career Experience - Media Technologies

## Industrial Mechanics

TI 0801	Industrial Mechanics Level I
TI 0802	Industrial Mechanics Level II

## Aviation Technologies

TI 0922	Introduction to Aviation Careers
TI 0923	Intermediate Aviation Technologies
*TI 0924	Advanced Aviation Technologies
*TI 9892	Occupational & Career Experience - Aviation Technologies

## Precision Machining/Automated Manufacturing

TI 1001	Precision Machining/Automated Manufacturing Level I
TI 1002	Precision Machining/Automated Manufacturing Level II
*TI 1003	Precision Machining/Automated Manufacturing Level III
*TI 9810	Occupational & Career Experience - Precision Machining/Automated Manufacturing

## Residential Carpentry/Building Construction

TI 1101	Residential Carpentry/Building Construction Level I
TI 1102	Residential Carpentry/Building Construction Level II
*TI 1103	Residential Carpentry/Building Construction Level III
*TI 9811	Occupational & Career Experience - Residential Carpentry/Building Construction

## Small Engine Repair

TI 1201	Small Engine Repair Level I
TI 1202	Small Engine Repair Level II
*TI 1203	Small Engine Repair Level III
*TI 9812	Occupational & Career Experience - Small Engine Repair

## Welding

TI 1401	Welding Level I
TI 1402	Welding Level II
*TI 1403	Welding Level III
*TI 9814	Occupational & Career Experience - Welding

## Metal Fabrication

TI 1404	Introduction to Metal Fabrication
TI 1401	Welding Level 1
TI 1405	Intermediate Metal Fabrication and Design
*TI 1406	Advanced Metal Fabrication

## Cosmetology

TI 1501	Introduction to Cosmetology
TI 1502	Intermediate Cosmetology
*TI 1503	Advanced Cosmetology
*TI 9815	Occupational & Career Experience - Cosmetology

## Commercial Photography

TI 0700	Media Technologies Fundamentals
TI 1601	Photography Assistant
TI 1602	Studio Assistant/Technician
*TI 1603	Photographic Technician
*TI 9807	Occupational & Career Experience - Media Technologies

## Broadcast Technology

TI 0700	Media Technologies Fundamentals
TI 1701	Broadcast Assistant
TI 1702	Studio Assistant
*TI 1703	Broadcast Technician
*TI 9807	Occupational & Career Experience - Media Technologies

## Environmental Science Technology

TI 1901	Introduction to Environmental Science Technology
TI 1902	Environmental Science Technology Applications
*TI 1903	Advanced Environmental Applications/Internships
*TI 9819	Occupational & Career Experience - Environmental Science Technology

\* **Capstone Courses** for the sequence option - Capstone courses are those in which the Occupational Competency Attainment will be measured. The content of capstone courses will be of an advanced nature.

## Engineering and Industrial Systems

*All Engineering and Industrial Systems programs must be Certified by a National Certification Agency to meet basic reimbursement requirements. Some programs require both Instructor and Program certification, others will require either Program or Instructor certification as determined by the Statewide Technical Committee for the program area. Examples are: AWS for Welding and NATEF/ASE for Automotive, Diesel and Collision Repair. The Instructor must hold both industry certification and E&S Professional-Technical Teacher Education certification.*

### Transportation Trades Cluster

TI 0200 FUNDAMENTALS OF MECHANICAL TECHNOLOGY  
IBED 0911 Two Semesters

Prerequisite: None

A course designed to provide fundamental mechanical skills to students who are considering a career in the mechanical, industrial, agricultural, or related trades. It is intended to serve as a basic course, not as an occupational preparation course. Students completing this course will be able to enter any of the advanced mechanical related courses of study and will be familiar with welding, engines, drive trains, and cooling, fuel, electrical and suspension systems.

### AVIATION TECHNOLOGIES

Aviation instruction is directed toward all aspects of aviation operations, including basic flight instruction. The primary objective for the program is to prepare students to enter the occupational field as airport management and operations personnel. The scope of instruction will cover airport operation, regulations, FAA directives, business and entrepreneurial practices, career choice and aircraft controls. The instructor must be a Certified Flight Instructor and Operations certified. Instructor Certification code #6045

TI 0922 INTRODUCTION TO AVIATION CAREERS  
IBED 0922 Semester/Trimester

Prerequisite: None

This introductory course will provide students with the opportunity to study the broad range of career choices in the aviation industry, including commercial and private operations. They may be allowed to take flight instruction as a separate and supplemental offering but will be taught the basic flight controls and general aircraft operation and maintenance. Introduction to the FAA guidelines governing ground and flight operations will be provided.

TI 0923 INTERMEDIATE AVIATION TECHNOLOGIES  
IBED 0923 One Year

Prerequisite: Intro to Aviation Careers

Students will be introduced to more advanced levels of understanding governing all aspects of the flight industry. Instruction on air and ground regulations for airport management and general operational practices will be provided. Metrology and other factors which relate to the field of operations will be studied. This is a year long course.

TI 0924 ADVANCED AVIATION TECHNOLOGIES  
IBED 0924 One Year

Prerequisite: Intermediate Aviation Technologies

Students will begin to specialize in various career choices in the aviation field. Special topics will be introduced using Case Studies of airline and aircraft operations including safe and unsafe situations for flight or passengers. Airport management will be studied, along with Fixed Base Operations and other aspects of the field. Students may obtain their Private Pilot License in a separate component of the offering but may choose to enter into Internships or similar occupational experiences with area flight operators.

TI 9892 OCCUPATIONAL & CAREER EXPERIENCE – AVIATION TECHNOLOGIES  
IBED 0997 Semester/Trimester

A community or industry based work experience activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work



experiences related to the career objectives of the student. The experiences must be supervised and monitored by the teacher. **(Note: This course must be approved on an individual program basis by the State Division.)**

## SMALL ENGINE REPAIR

Small Engine Repair is a program designed to prepare students with skills to read service manuals; use microfiche and parts catalogs; use hand tools, power tools, and overhaul tools; service and recondition engines; and troubleshoot and repair governors, speed controls, lubrication, ignition, fuel, power transfer, cooling exhaust and starting systems. The course also includes training in applied communications, and employability skills including leadership, human relations, and safe efficient work practices. The teacher must be certified as a Professional-Technical E&IS Instructor. This involves taking Professional Technical Education Teacher Education coursework in addition to holding the Industry certifications. Instructor Certification code #6310

TI 1201 SMALL ENGINE REPAIR LEVEL I  
IBED 0934 Semester/Trimester/Year Prerequisite: None

A course designed to introduce students to basic small engine repair. This will involve exploration, disassembly, and minor repair of various small engine equipment and the use of tools and measurement devices. A study of two and four stroke cycles, cooling and lubrication systems will be covered.

TI 1202 SMALL ENGINE REPAIR LEVEL II  
IBED 0935 Two Semesters/Three Trimesters/Two Period Block Year Prerequisite: Level I

A course designed to provide students with small engine repair applications. Students will be expected to diagnose and repair common equipment failures and make proper recommendations for maintenance of equipment to customers.

TI 1203 SMALL ENGINE REPAIR LEVEL III  
IBED 0936 Two Period Block Year Prerequisite: Level II

A course designed to provide student with team work, critical thinking, problem solving, diagnostics, and repairing to industry standards. Students should be familiar with all types of equipment, engines and power trains associated with small engines This will include lawn and garden equipment as well as recreational equipment such a outboard engines, snowmobiles, motorcycles, watercraft and industrial applications.

TI 9812 OCCUPATIONAL & CAREER EXPERIENCE - SMALL ENGINE REPAIR  
IBED 0997 Semester/Trimester

A community or industry based work experience activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objectives of the student. The experiences must be supervised and monitored by the teacher. **(Note: This course must be approved on an individual program basis by the State Division.)**

## AUTO BODY (COLLISION REPAIR) TECHNOLOGY

Auto Body (Collision Repair) Technology is a program designed to prepare students with skills that include basic trade skills, refinishing, sheet metal repair, welding, thermoplastic and fiberglass repair, painting, electrical system, trim accessories and hardware, body, frame and suspension systems, estimating and preparation for delivery and miscellaneous services. The course also includes training in applied communications, and employability skills including leadership, human relations, problem solving, critical thinking, and safe efficient work practices. Instructors must carry ASE Certification credentials in four of the instructional areas and the program must be NATEF certified. The teacher must also be certified as a Professional-Technical E&IS Instructor. This involves taking Professional Technical Education Teacher Education course work in addition to holding the Industry certifications. Instructor Certification code #6031

TI 0101 AUTO BODY (COLLISION REPAIR) TECHNOLOGY LEVEL I

IBED 0941	Semester/Trimester/Year	Prerequisite: None
	A course designed to introduce students to basic auto body (Collision Repair) technology.	
TI 0102 IBED 0942	AUTO BODY (COLLISION REPAIR) TECHNOLOGY LEVEL II Two Semesters/Three Trimesters/Two Period Block Year	Prerequisite: Level I
	A course designed to provide students with auto body (Collision Repair) technology applications including dent repair, alignment and painting.	
TI 0103 IBED 0943	AUTO BODY (COLLISION REPAIR) TECHNOLOGY LEVEL III Two Period Block Year	Prerequisite: Level II
	A course designed to provide student with team work, critical thinking, problem solving, diagnostics and repairing to industry standards. Students will be given advanced level training in all aspects of collision repair including frame, body, electrical, plastics, painting and finishing according to NATEF Standards.	
TI 9801 IBED 0997	OCCUPATIONAL & CAREER EXPERIENCE - AUTO BODY TECHNOLOGY Semester/Trimester	
	A community or industry based work experience activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objectives of the student. The experiences must be supervised and monitored by the teacher. <b>(Note: This course must be approved on an individual program basis by the State Division.)</b>	

## AUTOMOTIVE TECHNOLOGY

Automotive Technology is a program designed to prepare students with skills that include servicing and maintenance of all types of automobiles. Includes instruction in the diagnosis of malfunctions in and repair of engines; fuel, electrical, cooling, and brake systems; and drive train and suspension systems. Also instruction is given in the adjustment and repair of individual components and systems such as radiators, transmissions, and carburetors. The course also includes training in applied communications, and employability skills including leadership, human relations, and safe efficient work practices. Instructors must carry ASE Certification credentials in four of the eight instructional areas and the program must be NATEF certified. AYES Schools must be certified in Brakes, Suspension and Steering, Electrical/Electronics and Engine Performance. All programs at Professional Technical Schools will be required to be AYES Certified. The teacher must be certified as a Professional-Technical E&IS Instructor. This involves taking Professional Technical Education Teacher Education coursework in addition to holding the Industry certifications. Instructor Certification code #6032

TI 0201 IBED 0945	AUTOMOTIVE TECHNOLOGY LEVEL I Semester/Trimester/Year	Prerequisite: None
	A course designed to introduce students to basic automotive technology.	
TI 0202 IBED 0946	AUTOMOTIVE TECHNOLOGY LEVEL II Two Semesters/Three Trimesters/Two Period Block Year	Prerequisite: Level I
	A course designed to provide students with automotive technology applications.	
TI 0203 IBED 0947	AUTOMOTIVE TECHNOLOGY LEVEL III Two Period Block Year	Prerequisite: Level II
	A course designed to provide student with team work, critical thinking, problem solving, diagnostics and repairing to industry standards. Students are provided advanced level instruction according to NATEF Standards in the four areas of the program for which the program is certified.	
TI 9802	OCCUPATIONAL & CAREER EXPERIENCE - AUTOMOTIVE TECHNOLOGY	

**IBED 0997 Semester/Trimester**

A community or industry based work experience activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objectives of the student. The experiences must be supervised and monitored by the teacher. **(Note: This course must be approved on an individual program basis by the State Division.)**

**HEAVY EQUIPMENT/DIESEL**

Heavy Equipment/Diesel is a program designed to prepare students with skills for the field maintenance of heavy equipment, and in general maintenance and overhaul of such equipment. Includes instruction in inspection, maintenance, and repair of tracks, wheels, brakes, operating controls, pneumatic and hydraulic systems, electrical circuitry, engines, and in techniques of welding and brazing. The course also includes training in applied communications, and employability skills including leadership, human relations, and safe efficient work practices. Instructors must carry ASE Certification credentials in four of the eight instructional areas and the program must be NATEF certified. The teacher must be certified as a Professional-Technical E&IS Instructor. This involves taking Professional Technical Education Teacher Education coursework in addition to holding the Industry certifications. Instructor Certification code #6120.

**TI 0601 HEAVY EQUIPMENT/DIESEL LEVEL I****IBED 0950 Semester/Trimester/Year**

Prerequisite: None

A course designed to introduce students to basic heavy equipment/diesel applications.

**TI 0602 HEAVY EQUIPMENT/DIESEL LEVEL II****IBED 0951 Two Semesters/Three Trimesters/Two Period Block Year**

Prerequisite: Level I

A course designed to provide students with heavy equipment/diesel applications.

**TI 0603 HEAVY EQUIPMENT/DIESEL LEVEL III****IBED 0952 Two Period Block Year**

Prerequisite: Level II

A course designed to provide students with team work, critical thinking, problem solving, diagnostics and repairing to industry standards.

**TI 9806 OCCUPATIONAL & CAREER EXPERIENCE - HEAVY EQUIPMENT/DIESEL****IBED 0997 Semester/Trimester**

A community or industry based work experience activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objectives of the student. The experiences must be supervised and monitored by the teacher. **(Note: This course must be approved on an individual program basis by the State Division.)**

**INDUSTRIAL MECHANICS**

Industrial Mechanics is a program designed to prepare students with skills in shop practices, welding, basic machine shop, metal working, trouble shooting, rigging, equipment installation, maintenance and repair for a variety of systems found in industrial operations including drive components, piping systems, pumps, hydraulic and pneumatic systems, electronic systems, and bearings and seals as well as skills in the set-up and operation of preventive maintenance programs. The course also includes training in applied communications, and employability skills including leadership, human relations, and safe efficient work practices. The teacher must be certified as a Professional-Technical E&IS Instructor. This involves taking Professional Technical Education Teacher Education coursework in addition to holding the Industry certifications. Instructor Certification code #6109

**TI 0801 INDUSTRIAL MECHANICS LEVEL I****IBED 2431 Semester/Trimester/Year**

Prerequisite: None

A course designed to introduce students to basic industrial mechanics.

TI 0802 INDUSTRIAL MECHANICS LEVEL II  
IBED 2432 Two Semesters/Three Trimesters/Two Period Block Year Prerequisite: Level I

A course designed to provide students with industrial mechanics applications.

TI 0803 INDUSTRIAL MECHANICS LEVEL III  
IBED 2433 Two Period Block Year Prerequisite: Level II

A course designed to provide student with team work, critical thinking, problem solving, diagnostics, and repairing to industry standards.

TI 9808 OCCUPATIONAL & CAREER EXPERIENCE - INDUSTRIAL MECHANICS  
IBED 2497 Semester/Trimester

A community or industry based work experience activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objectives of the student. The experiences must be supervised and monitored by the teacher. **(Note: This course must be approved on an individual program basis by the State Division.)**

## Architectural and Design Cluster

### RESIDENTIAL CARPENTRY/BUILDING CONSTRUCTION

Residential Carpentry/Building Construction is a program designed to prepare students with skills to lay out, fabricate, erect, install, and repair structures and fixtures, using hand and power tools. The program includes instruction in common systems of framing, construction materials, estimating, and blueprint reading. The course also includes training in applied communications, and employability skills including leadership, human relations, and safe efficient work practices. Industry certification for the Construction Trades will be provided through demonstrated competency in the occupation and National Center for Construction Education and Research (NCCER) or Home Builders Institute (HBI) and National Association of Home Builders (NAHB) training. The teacher must be certified as a Professional-Technical E&IS Instructor. This involves taking Professional Technical Education Teacher Education coursework in addition to holding the Industry certifications. Instructor Certification code # 6101 or 6108

TI 1101 RESIDENTIAL CARPENTRY/BUILDING CONSTRUCTION LEVEL I  
IBED 0414 Semester/Trimester/Year Prerequisite: None

A course designed to introduce students to basic residential carpentry and building construction.

TI 1102 RESIDENTIAL CARPENTRY/BUILDING CONSTRUCTION LEVEL II  
IBED 0415 Two Semesters/Three Trimesters/Two Period Block Year Prerequisite: Level I

A course designed to provide students with residential carpentry and building construction applications.

TI 1103 RESIDENTIAL CARPENTRY/BUILDING CONSTRUCTION LEVEL III  
IBED 0416 Two Period Block Year Prerequisite: Level II

A course designed to provide student with team work, critical thinking, problem solving, diagnostics, and repairing/building to industry standards. Emphasis of work site skills is expected at this level with the majority of the students participating in off campus work experiences. Students should be prepared to pass the NCCER Basic Carpentry examination at this level.

TI 9811 OCCUPATIONAL & CAREER EXPERIENCE - RESIDENTIAL CARPENTRY/BUILDING CONSTRUCTION  
IBED 0497 Semester/Trimester

A community or industry based work experience activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objectives of the student. The experiences must be supervised and monitored by the teacher. **(Note: This course must be approved on an individual program basis by the State Division.)**

## CABINETMAKING AND MILLWORK

Cabinetmaking and Millwork is a program designed to prepare students with skills to engage in the mass production of such articles as windows and frames, moldings, trim and panels; and such products as home fixtures, kitchen cabinets, and office equipment. The program includes instruction in cutting, shaping, assembling, and refinishing articles; installing hinges, catches, drawer pulls, and other hardware; and planning and drafting layouts. The course also includes training in applied communications, and employability skills including leadership, human relations, and safe efficient work practices. The teacher must be certified as a Professional-Technical E&IS Instructor. This involves taking Professional Technical Education Teacher Education coursework in addition to holding the Industry certifications. Instructor Certification code #6105

TI 0401 CABINETMAKING AND MILLWORK LEVEL I  
IBED 0425 Semester/Trimester/Year Prerequisite: None

A course designed to introduce students to basic cabinetmaking and millwork.

TI 0402 CABINETMAKING AND MILLWORK LEVEL II  
IBED 0426 Two Semesters/Three Trimesters/Two Period Block Year Prerequisite: Level I

A course designed to provide students with cabinetmaking and millwork applications.

TI 0403 CABINETMAKING AND MILLWORK LEVEL III  
IBED 0427 Two Period Block Year Prerequisite: Level II

A course designed to provide student with team work, critical thinking, problem solving, diagnostics and repairing/building to industry standards.

TI 9804 OCCUPATIONAL & CAREER EXPERIENCE - CABINETMAKING AND MILLWORK  
IBED 0497 Semester/Trimester

A community or industry based work experience activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objectives of the student. The experiences must be supervised and monitored by the teacher. **(Note: This course must be approved on an individual program basis by the State Division.)**

## ARCHITECTURAL DRAFTING

Architectural Drafting is a program designed to prepare student with skills to support architects and/or architectural engineers in developing plans for buildings or other structures, using a variety of building materials; in creating layouts and designs in keeping with building codes, zoning laws, ordinances, and other regulations; in styling and planning in keeping within cost limitations and client preferences, and in the use of computer assistance design equipment and materials. The course also includes training in applied communications, and employability skills including leadership, human relations, and safe efficient work practices. The teacher must be certified as a Professional-Technical E&IS Instructor. This involves taking Professional Technical Education Teacher Education coursework in addition to holding the Industry certifications. Instructor Certification code #6130

TI 0301 ARCHITECTURAL DRAFTING LEVEL I  
IBED 0721 Semester/Trimester/Year Prerequisite: None

A course designed to introduce students to basic architectural drafting.

TI 0302 ARCHITECTURAL DRAFTING LEVEL II  
 IBED 0722 Two Semesters/Three Trimesters/Two Period Block Year Prerequisite: Level I

A course designed to provide students with architectural drafting applications.

TI 0303 ARCHITECTURAL DRAFTING LEVEL III  
 IBED 0723 Two Period Block Year Prerequisite: Level II

A course designed to provide student with team work, critical thinking, problem solving, diagnostics and repairing/developing to industry standards.

TI 9803 OCCUPATIONAL & CAREER EXPERIENCE - ARCHITECTURAL DRAFTING  
 IBED 0797 Semester/Trimester

A community or industry based work experience activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objectives of the student. The experiences must be supervised and monitored by the teacher. **(Note: This course must be approved on an individual program basis by the State Division.)**

## MECHANICAL DRAFTING

Mechanical Drafting is a program designed to prepare students with skills to assist engineers in the development of detailed working drawings and related specifications for mechanical devices and machinery. Includes instruction in sketching rough layouts; drafting detailed multi view drawings; computing magnitude, direction, and point of application of tension, compression, and bending factors; compiling and analyzing text data to determine design effects on machinery in relations to temperature, pressure, speed, horsepower, and fuel consumption; producing drawings that indicate dimensions, tolerances, fasteners, joining requirements, and other engineering data, and in the use of computer assistance design equipment and materials. The course also includes training in applied communications, and employability skills including leadership, human relations, and safe efficient work practices. The teacher must be certified as a Professional-Technical E&IS Instructor. This involves taking Professional Technical Education Teacher Education coursework in addition to holding the Industry certifications. Instructor Certification code #6130

TI 0901 MECHANICAL DRAFTING LEVEL I  
 IBED 0731 Semester/Trimester/Year Prerequisite: None

A course designed to introduce students to basic mechanical drafting.

TI 0902 MECHANICAL DRAFTING LEVEL II  
 IBED 0732 Two Semesters/Three Trimesters/Two Period Block Year Prerequisite: Level I

A course designed to provide students with mechanical drafting applications.

TI 0903 MECHANICAL DRAFTING LEVEL III  
 IBED 0733 Two Period Year Prerequisite: Level II

A course designed to provide student with team work, critical thinking, problem solving, diagnostics, and repairing/developing to industry standards.

TI 9809 OCCUPATIONAL & CAREER EXPERIENCE - MECHANICAL DRAFTING  
 IBED 0797 Semester/Trimester

A community or industry based work experience activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objectives of the student. The experiences must be supervised and monitored by the teacher. **(Note: This course must be approved on an individual program basis by the State Division.)**

## Engineering and Manufacturing Cluster

### ELECTRONIC TECHNOLOGY

Electronic Technology is a three year program designed to provide students skills to assemble, install, operate, maintain, and repair electrical/electronic equipment used in the communications industry and manufacturing. The program includes instruction in using common industrial tools and equipment, in various types of applications such as power supplies, televisions, video cassette recorders, amplifiers, motors, controls, digital and computer circuitry, synchro-and servo-mechanisms, mechanical power transfer systems, pneumatics, hydraulic systems, and three-phase A.C., electronic wave-shaping, and control circuitry. The courses also include training in applied communications, and employability skills including leadership, human relations, and safe efficient work practices. At the base of all instruction is a basic application of academic skills in the classroom and through laboratory exercises which are linked to achievement standards. Beginning students should have a strong base in mathematics. Certification through either CEMA or ISCET is generally required for employment. Instructor Certification Code #5018.

TI 0501 BASIC ELECTRONICS TECHNOLOGY  
IBED 0462 One Year - Semester/Two Trimesters optional

This is the beginning level course of the Electronics Technology program. Students should have completed or be currently enrolled in Algebra I prior to enrolling in the course. The course will reinforce skill development in applied mathematics and physics through theory and laboratory assignments based on industry procedures. Students will be provided instruction on safety, introduction to the Electronics industry, tool and equipment use, soldering techniques, and employability skills and habits. Students will be involved in activities which will reinforce Problem Solving, Teaming, Language Arts, Science, and Mathematics skills which use real-life industry examples and procedures. The course will give students the opportunity to study devices that use DC to Series-Parallel circuits and AC concepts. This course should be offered as a year long course. (Semester optional)

TI 0502 INTERMEDIATE ELECTRONICS TECHNOLOGY  
IBED 0463 One Year Prerequisite: Basic Electronics Technology  
or Permission of the Instructor

This is the second level course in the Electronics Technology program. This course is a year long offering. Students will be required to develop a Project Development Plan and do research on the various projects they will build as a part of the course. Students will be involved in projects which will reinforce Problem Solving, Teaming, Language Arts, Science, and Mathematics skills through real-life industry examples and procedures. The course will give students the opportunity to build and test devices that use DC to Series-Parallel circuits, AC concepts, digital, and solid state circuits. This course should be offered as a year long course. TI 0501 required or permission of instructor.

TI 0503 ADVANCED ELECTRONICS TECHNOLOGY  
IBED 0464 One Year - Multiple-Period Block Prerequisite: Intermediate Electronics Technology

This is the third level course in Electronics Technology. This course consists of a multiple period block of instruction offered for a full year. Students will refine their Project Development Plan and develop more detailed projects in final form during the course. The course will give students the opportunity to build and test advanced level devices that use DC principles for RC and RL circuits and AC concepts. Digital and Solid State circuits including FET, IC, and combinational logic applications will be studied and tested. Academic subject fields will be reinforced throughout all aspects of the course and students will be expected to practice proper Customer Relations skills at all times. All students will be expected to complete an internship and a number of special projects to earn credit in the course. TI 0502 is required.

TI 9805 ELECTRONIC TECHNOLOGY WORK EXPERIENCE/INTERNSHIP  
IBED 0497

Electronics Technology programs have the option of offering two work experience courses to enhance the skill development of students. **Both courses are coded with the same IBED code (#0497).** The preferred

option is for paid work experience. **(Note: This course must be approved on an individual program basis by the State Division.)**

#### OCCUPATIONAL & CAREER EXPERIENCE - Non-Paid Semester/Trimester

A community or industry based work experience activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objectives of the student. The experiences must be supervised and monitored by an educator.

TI 9900      INTERNSHIP - Paid Work Experience  
IBED 0498   Semester/Trimester

Community and industry based instruction organized and planned to provide specialized skills unique to an occupation or industry. Students are placed in businesses which provide paid on-the-job experience which is related to the student's primary area of study. The experience must be supervised by the teacher or Coop Coordinator using a training agreement with the business and the students must have a training plan. (See Work Based Learning Manual)

### PRECISION MACHINING/AUTOMATED MANUFACTURING

Precision Machining/Automated Manufacturing is a program designed to prepare students with skills to shape metal parts on machines such as lathes, grinders, drill presses, milling machines, and shapers. Programs may also train individuals in the use of one machine tool. Includes instruction in making computations related to work dimensions, CNC and EDM machines, testing feeds and speeds of machines using precision measuring instruments such as layout tools, micrometers, and gauges; machining and heat-treating various metals; and in laying out machine parts. The course also includes training in applied communications, and employability skills including leadership, human relations, and safe efficient work practices. The teacher must be certified as a Professional-Technical E&IS Instructor. This involves taking Professional Technical Education Teacher Education coursework in addition to holding the Industry certifications. Instructor Certification code # 6232 or 5022

TI 1001      PRECISION MACHINING/AUTOMATED MANUFACTURING LEVEL I  
IBED 2403   Semester/Trimester/Year      Prerequisite: None

A course designed to introduce students to basic precision machining and automated manufacturing.

TI 1002      PRECISION MACHINING/AUTOMATED MANUFACTURING LEVEL II  
IBED 2404   Two Semesters/3 Trimesters/Two Period Block Year      Prerequisite: Level I

A course designed to provide students with precision machining and automated manufacturing applications.

TI 1003      PRECISION MACHINING/AUTOMATED MANUFACTURING LEVEL III  
IBED 2405   Two Period Block Year      Prerequisite: Level II

A course designed to provide student with team work, critical thinking, problem solving, diagnostics, and repairing/producing to industry standards.

TI 9810      OCCUPATIONAL & CAREER EXPERIENCE - PRECISION MACHINING/AUTOMATED  
IBED 2497   MANUFACTURING  
Semester/Trimester

A community or industry based work experience activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objectives of the student. The experiences must be supervised and monitored by the teacher. **(Note: This course must be approved on an individual program basis by the State Division.)**



## WELDING TECHNOLOGY

Welding is a program designed to prepare students with skills for occupations in welding as form cutters, tack welders, welder assemblers, welder helpers, combination welders, arc welders and production line welders. The content includes use of blue prints and shop drawing; use of gases and/or welding processes; and brazing parts according to diagrams, blueprints, or written specification. Laboratory activities are an integral part of this program and provide instruction in various processes and techniques of welding and fabrication skills including oxyacetylene welding and cutting, brazing, arc welding, MIG welding, flux core arc welding, TIG welding, certification test preparation and use of current industry standards and techniques. Students will be provided instruction in a minimum of Level One AWS EG2.0-95 skill development. The course also includes training in applied communications, and employability skills including leadership, human relations, and safe efficient work practices. The Industry Certification for Welding is the American Welding Society (AWS). All instructors must carry AWS Educator (AWE as per AWS QC 5-91 requirements) or Inspector (AWI) certification. The teacher must be certified as a Professional-Technical E&IS Instructor. This involves taking Professional Technical Education Teacher Education coursework in addition to holding the Industry certifications. Instructor Certification code #6236

TI 1401 IBED 2421	WELDING LEVEL I Semester/Trimester/Year	Prerequisite: None
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A course designed to introduce students to basic welding. The course introduces students to the metallic processes used in metals fabrication and provides them instruction on measurement and layout of material to be welded. Blueprint reading and fundamentals of welding applications using the AWS curriculum is the main component of instruction.

TI 1402 IBED 2422	WELDING LEVEL II Two Semesters/3 Trimesters/Two Period Block Year	Prerequisite: Level I
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A course designed to provide students with welding applications using level one of the AWS curriculum. Students will be provided the initial stages of instruction that will prepare them for certification as an Entry Level Welder as described in AWS publication EG2.0-95. Completion of TI 1403 will give students the necessary skills development to certify as an Entry Level Welder.

TI 1403 IBED 2423	WELDING LEVEL III Two Period Block Year	Prerequisite: Level II
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A course designed to provide student with team work, problem solving, diagnostics, and designing, repairing, fabricating or building to industry standards. Students will be provided instruction following the AWS curriculum described in AWS EG2.0-95. Testing of student projects will be covered using AWS publication QC10-95. Some instruction may be provided under AWS EG3.0-96 to more advanced students if time permits. Students should have the skill development needed to certify as an Entry Level Welder after the completion of this course.

## METAL FABRICATION TECHNOLOGY

Metal Fabrication is a program that provides basic metallurgy knowledge and skills for students who want to work in the field of ornamental metalworking, including precision and fine metal skills such as jewelry and metal sculpture. Students will be provided an opportunity to study metallurgy science and the basics of heating and treating metals to be used in various applications, including casting, forming, fitting, bending, welding and hammering. They will develop design and function skills through active development of products, beginning with base metals and progressing to fine or precious metals. Students will be expected to produce artwork and consumer product pieces ranging from free standing metal sculptures to wall ornamentation, lawn and garden products, and optional jewelry pieces. SkillsUSA is the recognized student organization that provides students with leadership and civic skills. The instructor must be PTE certified in metalworking or welding with either TI 6237 or TI 6236 endorsements.

TI 1404 IBED 2424	INTRODUCTION TO METAL FABRICATION Semester or Year	Prerequisite: None
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The introduction to metal fabrication course provides a basic understanding of the metals and processes used in the making of metal structures, ornamentation and consumer products. Students will study the science of metallurgy and proper treating of base and precious metals. Metal scrollwork for simple garden and lawn ornaments or wall and house pieces will be included in the products that students will fabricate. Casting and forming will be covered, along with some fabrication using soldering, brazing, gas and electric welds.

TI 1405 INTERMEDIATE METAL FABRICATION AND DESIGN  
IBED 2425 One Year

Prerequisite: Welding Level 1

The second level course provides more complex metal treating techniques and introduces design and function into the product to be developed. Students will be given an opportunity to copy existing artwork and to develop designs that will meet various consumer and community needs. Metal sculpturing techniques such as stretching, shrinking, and forming will be offered to the students at this level. Students will be expected to develop basic level consumer-ready pieces for home or personal use. More advanced welding and metal fabrication skills will be taught.

TI 1406 ADVANCED METAL FABRICATION  
IBED 2426 One Year/2-Period Block

Prerequisite: Intermediate Metal Fabrication and Design

The advanced level course for Metal Fabrication requires students to become proficient in design and development of functional pieces for personal, home or community applications. Students will be expected to demonstrate welding skills and fabrication techniques which will meet industry standards in a variety of settings. Industry internships will be offered for students with appropriate skill level in traditional entry level metalworking fields. Individualized assignments may be made with community groups or other interested parties for specific projects. Group projects will be a part of the curriculum, as available, to promote community and civic appreciation. Optional instruction may be provided in jewelry and precision ornamental skills.

TI 9814 OCCUPATIONAL & CAREER EXPERIENCE – WELDING and METAL FABRICATION  
IBED 2497 Semester/Trimester

A community or industry based work experience activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objectives of the student. The experiences must be supervised and monitored by the teacher. **(Note: This course must be approved on an individual program basis by the State Division.)**

## Information System Technologies Cluster

This section incorporates all the aspects of networking, computer repair, maintenance and related web instructional courses that are offered in Engineering and Industrial Systems program in Idaho schools. Idaho does not recognize the older titles for the Information Systems Technology areas such as TST, INT, or ICT. These are all now incorporated into the IST label. Local districts will be able to determine what mix of courses best fit their community's needs and select those from the following list of courses. Most advanced level programs will continue to follow a specific industry training sequence such as the Cisco path but smaller schools may opt for the Net+ or A+ level of instruction.

The curriculum committee expanded the range of courses to include web design, animation, programming, data base design, and other current applications. This provides for a more seamless offering at the school level, provided the instructor has the appropriate industry certification in that field. Oracle Academies are now being offered as a component of the IST cluster of instruction. School may elect to offer the courses as part of their existing IST program or may decide to concentrate on programming and data base instruction as an option. A curriculum guide should be available by spring of 2005 as the committee finishes its work.

The instructor must have appropriate certification in Networking+, I-Net+, A+, IC3 or other industry standards such as Cisco or Oracle that are recognized by CompTIA to be able to teach these courses. PTE certification

code 6153 must also be held for funding approval.

- TI 0550 INTRODUCTION TO INFORMATION TECHNOLOGIES  
 IBED 3020 (Previously: INTRODUCTION TO INFORMATION AND COMMUNICATIONS TECHNOLOGIES)  
 Semester/Trimester Prerequisite: None
- This course is a survey of computer technologies. This course may include ethics of computer and network use, web design, introduction to graphics, animation, computer hardware and operating systems, elementary networking, troubleshooting and programming. (The student should have prior knowledge of an "office suite" to include but not be limited to word processing, spreadsheet, data base, file management, and presentation software.) (60 hours)
- TI 0551 COMPUTER SUPPORT ESSENTIALS (Previously: NETWORKING APPLICATIONS)  
 IBED 3063 2 semesters one hour a day/2hrs-1 semester/3 trimesters  
 Prerequisite: Introduction to Information Technologies
- This course provides an overview of basic computer hardware and software concepts including industry language, data communications protocols, overview of microcomputers, and network user basics. Each computer subsystem component is then explored in depth through the use of lecture, research, and guided labs, with an emphasis on hardware and software troubleshooting. (IT essentials I) (A+ Core and OS)
- TI 0552 INTERNET TECHNOLOGIES – Inet+ (Previously: TELECOM APPLICATIONS)  
 IBED 3087 One Semester/Two Trimesters Prerequisite: Introduction to Information Technologies
- This course is a survey of Internet protocols, structure, servers, infrastructure, security issues, client management, terminology and a history of the Internet. Maps to: CompTIA i-Net+ certification.
- TI 0553 DIGITAL VIDEO (Previously: VIDEO/GRAPHICS APPLICATIONS)  
 IBED 3088 One Semester/Two Trimesters Prerequisite: Digital Media
- Students create digital projects demonstrating a working knowledge of camera, audio, and lighting systems as well as the capabilities of non-linear editing systems. Projects are published to a variety of media formats. E.g. Premiere, Avid, Final Cut Pro. (90-180 hrs.)
- TI 0554 DIGITAL MEDIA (Previously: TECHNOLOGY ASSISTANT INTERNSHIP)  
 IBED 3095 One Year Prerequisite: Introduction to Information Technologies or Instructor Approval
- This course introduces the student to basic skills and principles that may include those pertaining to 2D and 3D image creation and manipulation, non-linear video editing, interactive media, and web content development.
- TI 0555 WEB DESIGN (Previously: WEB DESIGN AND APPLICATIONS)  
 IBED 3075 Semester/Two Trimesters Prerequisite: Digital Media
- This course will provide a framework for best practices in web design. Students will learn the nature of usable websites, designing for aesthetic appeal, performing usability studies, information architecture, designing for accessibility, and technical issues. Adobe or Macromedia Suites are usual offerings. (90-180 hrs.)
- TI 0557 PROGRAMMING FUNDAMENTALS  
 IBED 3046 (Previously: INTRODUCTION TO VISUAL LANGUAGES/COMPUTER PROGRAMMING)  
 Semester/Two Trimesters Prerequisite: Introduction to Information Technologies
- This course introduces the student to programming, including but not limited to, decision structures, functions, object-oriented coding, procedures, variables and sub-routines. Examples: Introductory Visual Basic,

JavaScript, etc. Oracle fundamentals would be a logical option in this course. (60 hours)

TI 0558 INTERMEDIATE PROGRAMMING (Previously: ADVANCED COMPUTER DESIGN AND REPAIR)  
IBED 3076 One Year Prerequisite: Programming Fundamentals

Students will plan and create interactive GUI applications. Course topics may include, but are not limited to, database information management, reports, interaction with other platforms/applications, Internet related controls, database design, or virtual environment programming.

TI 0559 DATABASE DESIGN FUNDAMENTALS  
To be assigned Semester/Trimester Prerequisite: Programming Fundamentals (strongly recommended)

This course is an introduction to the fundamentals of database management systems. Topics can include, but are not limited to, conceptual data modeling, relational data models, Structured Query Language (SQL) and database design and development. This course would be where advanced level Oracle Academy training would be placed.

TI 0600 NETWORK BASICS (Previously: BASIC NETWORK CERTIFICATION PREPARATION)  
IBED 3061 Two Semesters/Three Trimesters/One Year Prerequisite: Intro to Information and Communications Technology

This course provides instruction and technical abilities in network implementation and support, protocols and standards, and provides knowledge of media and topologies. Students will study the TCP/IP protocol, IP addressing, subnet masks, and network trouble-shooting, the role of computers in a network system, the OSI model, structured wiring systems, and simple LAN and WAN design. Routable protocols and the role of switches in LAN segmentation will be introduced. Maps to: Network+/CCNA1 and 2

TI 0604 NETWORK OPERATING SYSTEMS (Previously: NT4 ADMINISTRATION)  
IBED 3067 1 or 2 semesters/1 hr. recommended Prerequisite: Network Basics

This course is designed to provide students with the background necessary to install, maintain, and troubleshoot network operating systems. These technologies include multiple network operating systems. It is an intensive introduction to multi-user, multi-tasking network operating systems. Students will explore a variety of topics including characteristics of different operating systems, installation procedures, security issues, back up procedures and remote access. Hands-on exercises and scenario-based reviews are included with coverage of critical networking issues and operating concepts. Maps to: Microsoft/Novell/UNIX/Linux/Server+/IT Essentials II

TI 0605 INTERACTIVE MEDIA (Previously: NT4 SUPPORT CORE)  
IBED 3066 Semester/Two Trimesters (Multi-Period Block) Prerequisite: Digital Media

This course will teach students the tools that are used in the creation of multimedia-rich learning, training, or virtual environment materials. Students learn to use authoring tools, animation and interactivity, web development, manipulation of bitmaps, web graphics, vector graphics, video and sound. (90-180 hrs.)

TI 0606 3D ANIMATION & VISUALIZATION (Previously: NOVELL NETWARE)  
IBED 3065 Semester/Two Trimesters (Multi-Period Block) Prerequisite: Digital Media

Students will create planar and solid models and apply texture maps, ray tracing, and environmental elements such as lighting effects. May include, but is not limited to, fly-by and walk-through architectural/engineering presentations and character animation. E.g. Maya, 3D Studio Max, Dinama 4D, AutoCAD (90-180 hrs)

TI 0607 NETWORK ADMINISTRATION  
IBED 3064 Semester/Two Trimesters Prerequisite: Network Basics

This course could encompass a series of classes leading to certification in advanced network administration. This includes, but is not limited to, Microsoft, Linux, Novell, or CompTIA networking certifications. Maps to: MCSA/CNA/UNIX/Linux+/Security+ - Any advanced Network OS coursework.

TI 0608 COMPUTER GRAPHICS AND DESIGN (Previously: INTRODUCTION TO CISCO APPLICATIONS)  
 IBED 3068 Semester/Two Trimesters Prerequisite: Digital Media

This course will provide instruction in 2D graphic manipulation. Students will use graphic editing software to acquire graphic file formats, then digitally manipulate the images to accomplish many tasks, including photo restoration, color/tonal correction, scaling, cropping, composition, and animation. Students will generate final composite artwork for inclusion in a portfolio. E.g. Photoshop, Fireworks, CorelDRAW Freehand, and/or Illustrator. (90-180 hrs)

TI 0609 INTERNETWORKING TECHNIQUES (Previously: NETWORKING PRINCIPLES)  
 IBED 3062 Two Semesters – 2 hours/day Prerequisite: Network Basics

This course covers LAN segmentation using routers, advanced router configurations, LAN switching theory, virtual LANs, and advanced LAN design technologies. The course also introduces WAN theory and design, WAN technology, encapsulation methods, and network troubleshooting. Maps to: CCNA 3-4

TI 0611 INTERNSHIP – NETWORK AND COMPUTER SUPPORT  
 IBED 3072 (Previously: WAN SERVICES AND FRAME RELAY APPLICATIONS)  
 Semester/Two Trimesters Prerequisite: Instructor Permission

This is a course requiring students to practice skills learned in the initial levels of the program by performing the duties of an assistant to the system operator of a computer network or technology center. Duties will be performed in conjunction with adults either in the school district or on a school-to-work assignment in the community. Skills to be learned and reinforced would include installing, maintaining, and troubleshooting equipment.

TI 9855 COMPREHENSIVE IT MEDIA PROJECT  
 IBED 3098 (Previously: OCCUPATIONAL & CAREER EXPERIENCE – INFORMATION AND COMMUNICATIONS TECHNOLOGY)  
 Semester/Trimesters Perquisite: None

Students will complete an advanced project under the direction of the IT faculty. The activity will be outlined and developed by the instructor and student. The nature of the program will include elements from each facet of the student's program curriculum and result in a portfolio of students work. Integration with academic subjects is strongly encouraged. (180 hrs.)

## Media Technologies Cluster

### GRAPHICS COMMUNICATIONS TECHNOLOGY

Graphic/Printing/Digital Imaging is a group of instructional programs that prepare individuals to design and execute layouts and illustrations for advertising displays and instructional manuals. The program includes instruction in all phases of electronic and mechanical offset printing, layout, composition, pressmark and binding, flexography, image manipulation, lithography, photoengraving, digital photography, computer graphics, and other competencies related to the graphic arts industry. The course also includes training in applied communications, and employability skills including leadership, human relations, and safe efficient work practices. SkillsUSA is the official Professional-Technical Student Organization; GATEF/PrintEd program certification is required. The teacher must be certified as a Professional-Technical E&IS Instructor. This involves taking Professional Technical Education Teacher Education coursework in addition to holding the industry certifications. Instructor Certification code #6190 or 6180.

The Graphic Communications Technology program is one of four programs in the Media Technologies group with Journalism Technology, Broadcast Technology, and Photographic Technology. The sequence of instruction for all four programs begins with a one semester Media Technologies Fundamentals course, suggested for sophomore level students. Advanced level courses are encouraged to offer on the job training or paid internships in industry settings.

TI 0700 MEDIA TECHNOLOGIES FUNDAMENTALS

IBED 1311	Semester/Trimester	Prerequisite for all Graphics Courses
This course is designed to provide the basic fundamental competencies for the Media Technologies and is to be offered as the beginning course at the sophomore level. Legal and Ethical issues, fundamental tool and equipment skills, transferable knowledge sets, employability skills, and communication skills and terminology used throughout the industry will be developed in this offering.		
TI 0701 IBED 1313	GRAPHICS ASSISTANT Semester/Trimester/Year	Prerequisite: Media Technology Fundamentals
A course designed to introduce students to basic graphic/printing. The course would include digital photo/graphics and computer graphics.		
TI 0702 IBED 1314	PRE PRESS/PRODUCTION TECHNICIAN Two Semesters/3 Trimesters/One Period Block Year	Prerequisite: Graphics Assistant
A course designed to provide students with graphic printing applications including digital and computerized graphics. Transfer of images from digital processes to paper and other media is included as well as transferring paper images to digital files for modification. Pre press and copy production skills including set up, image development, layout, and final draft copy would be learned.		
TI 0703 IBED 1315	GRAPHICS COMMUNICATIONS TECHNICIAN Two Period Block Year	Prerequisite: Pre Press/Production Technician
A course designed to provide student with team work, critical thinking, problem solving, diagnostics, designing, and computer graphics from basic digital images to final print. Students should be provided opportunities to prepare finished products such as newsletters, catalogs, and school publications in a two-period block of instruction. All work should be performed to industry standards.		
TI 9807 IBED 1397	OCCUPATIONAL & CAREER EXPERIENCE – MEDIA TECHNOLOGIES Semester/Trimester/Year	
A community or industry based work experience activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objectives of the student. The experiences must be supervised and monitored by the teacher. <b>(Note: This course must be approved on an individual program basis by the State Division.)</b>		

## JOURNALISM TECHNOLOGY

The purpose of this program is to provide students with the necessary skills to pursue a career in the field of journalism or commercial writing. Students will be involved in classroom and laboratory experiences in conventional and digital photography, page layout, creative, investigative, technical writing and script writing. A large part of the instruction will be devoted to real life publication development and design. Schools that are using Video Yearbooks may offer this activity as a major work assignment for students. The course also includes training in applied communications, and employability skills including leadership, human relations, and safe efficient work practices. SkillsUSA is the official Professional-Technical Student Organization. Active participation in development and planning of school publications will be required of all students. The teacher must be certified as a Professional-Technical E&IS Instructor. This involves taking Professional Technical Education Teacher Education coursework in addition to holding the Industry certifications. Instructor Certification code #6180 or 6192.

The Journalism Technology program is one of four programs in the Media Technologies group with Graphic Communications Technology, Broadcast Technology, and Photographic Technology. The sequence of instruction for all four programs begins with a one semester Media Technologies Fundamentals course, suggested for sophomore level students. Advanced level courses are encouraged to offer on the job training or paid internships in industry settings.

TI 0700	MEDIA TECHNOLOGIES FUNDAMENTALS
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<b>IBED 1311</b>	Semester/Trimester	Prerequisite for all Journalism Courses
This course is designed to provide the basic fundamental competencies for the Media Technologies and is to be offered as the beginning course at the sophomore level. Legal and Ethical issues, fundamental tool and equipment skills, transferable knowledge sets, employability skills, and communication skills and terminology used throughout the industry will be developed in this offering.		
<b>TI 0710</b> <b>IBED 1341</b>	<b>JOURNALISM TECHNOLOGY A</b> Semester/Trimester	Prerequisite: Media Technologies Fundamentals
An entry level course which provides instruction in the basic skills and techniques needed in the field of journalism. The use of electronic desktop publishing as a means of producing for the journalistic media is explored. The content should include, but not be limited to the following: recognition of and writing news; development of editorials, sport articles, and feature stories; workshop experience in photography, lay-outs, advertising, printing, and other practical aspects of journalistic enterprise.		
<b>TI 0711</b> <b>IBED 1342</b>	<b>JOURNALISM TECHNOLOGY B</b> Two Semesters/Three Trimesters/One Period Block Year	Prerequisite: Journalism Technology A
A course which provides students with actual hands-on experiences associated with publishing a tabloid newspaper. Writing, editing, photographic layout, desktop publishing, legal and ethical issues and business management skills are emphasized. Students actually perform all the skills necessary to produce a monthly school newspaper. Assignments for video notebooks and or technical writing for the development of technical manuals may be typical assignments.		
<b>TI 0712</b> <b>IBED 1344</b>	<b>JOURNALISM PRODUCTION – YEARBOOK</b> Two Period Block Year	Prerequisite: Journalism A & B
This course provides students with actual hands-on experience associated with producing a conventional student yearbook or a video yearbook. Assistance to students who are developing Portfolios may be assigned to journalism students. Writing, editing, photographic layout, desktop publishing and business management skills are emphasized. Students actually perform all the skills necessary to produce a school yearbook.		
<b>TI 0713</b> <b>IBED 1345</b>	<b>JOURNALISM PRODUCTION – NEWSPAPER</b> Two Period Block Year	Prerequisite: Journalism A & B
This course provides students with actual hands-on experiences associated with the publication of a tabloid newspaper, magazine or similar product. Writing, editing, photographic layout, desktop publishing, legal and ethical issues and business management skills are emphasized. Students actually perform all the skills necessary to produce a monthly school newspaper or other publications. Assignments for video notebooks and or technical writing for the development of technical manuals may be typical assignments.		
<b>TI 0714</b> <b>IBED 1346</b>	<b>PHOTO JOURNALISM</b> Two Period Block Year	Prerequisite: Journalism A & B
A course which provides students with actual hands-on experiences associated with producing photographic works for the school and special activities. The program may offer assistance to students who are developing portfolios by assigning responsibilities for assistance to journalism students. Creating, editing, photographic layout, desktop publishing and business management skills are emphasized. Students actually perform all the skills necessary to produce a various school photos and/or special projects.		
<b>TI 0715</b> <b>IBED 1347</b>	<b>BROADCAST JOURNALISM</b> Two Period Block Year	Prerequisite: Journalism A & B
A course which provides students with actual hands-on experiences associated with producing or assisting with the school closed circuit broadcasts and other video projects. The program may offer assistance to students who are developing portfolios by assigning responsibilities for assistance to journalism students. Creating, editing, layout, sound clips, equipment set up, authoring, desktop publishing and business		

management skills are emphasized. Students actually perform all the skills necessary to produce a school broadcast or video production.

TI 9807 OCCUPATIONAL & CAREER EXPERIENCE – MEDIA TECHNOLOGIES  
IBED 1397 Semester/Trimester/Year

A community or industry based work experience activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objectives of the student. The experiences must be supervised and monitored by the teacher. **(Note: This course must be approved on an individual program basis by the State Division.)**

## COMMERCIAL PHOTOGRAPHY

Commercial Photography is a program designed to prepare students for entry level employment in the photographic studio, processing lab, and/or other related photographic businesses. Instruction includes use and care of cameras, film processing techniques, composition, darkroom printing techniques, digital imaging, product illustration, portraiture techniques, and photo journalism with emphasis on skills needed in portrait, commercial and industrial applications. Instruction also includes communication skills, leadership skills, human relations, and employability skills, as well as safe, efficient work practices. SkillsUSA is the official Professional-Technical Student Organization. The teacher must be certified as a Professional-Technical E&IS Instructor. This involves taking Professional Technical Education Teacher Education coursework in addition to holding the Industry certifications. Instructor Certification code #6192

The Commercial Photography Technology program is one of four programs in the Media Technologies group with Graphic Communications Technology, Broadcast Technology, and Journalism Technology. The sequence of instruction for all four programs begins with a one semester Media Technologies Fundamentals course, suggested for sophomore level students. Advanced level courses are encouraged to offer on the job training or paid internships in industry settings.

TI 0700 MEDIA TECHNOLOGIES FUNDAMENTALS  
IBED 1311 Semester/Trimester Prerequisite for all Commercial Photography courses

This course is designed to provide the basic fundamental competencies for the Media Technologies and is to be offered as the beginning course at the sophomore level. Legal and Ethical issues, fundamental tool and equipment skills, transferable knowledge sets, employability skills, and communication skills and terminology used throughout the industry will be developed in this offering.

TI 1601 PHOTOGRAPHY ASSISTANT  
IBED 1333 Semester/Trimester/Year Prerequisite: Media Technologies Fundamentals

A course designed to introduce students to basic Commercial Photography.

TI 1602 STUDIO ASSISTANT/TECHNICIAN  
IBED 1334 Two Semesters/3 Trimesters/Two Period Block Year Prerequisite: Photography Assistant

A course designed to provide students with commercial photography applications.

TI 1603 PHOTOGRAPHIC TECHNICIAN  
IBED 1335 Two Period Block Year Prerequisite: Studio Assistant/Technician

A course designed to provide students with team work, creative thinking, problem solving, diagnostics and creative designing to industry standards.

TI 9807 OCCUPATIONAL & CAREER EXPERIENCE – MEDIA TECHNOLOGIES  
IBED 1397 Semester/Trimester

A community or industry based work experience activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work



experiences related to the career objectives of the student. The experiences must be supervised and monitored by the teacher. **(Note: This course must be approved on an individual program basis by the State Division.)**

## BROADCAST TECHNOLOGIES

Broadcast Technologies is a program designed to prepare students in understanding the basic concepts of the radio and television broadcast and telecommunications field. Curricular activities include: script writing, lighting, filming and directing, electronic news gathering and field production. The program includes instruction about basic telecommunication systems, and the function and use of video and audio equipment, editing and set design. The courses will also include producing and directing programming, as well as employability skills.

SkillsUSA is the official Professional-Technical Student Organization. The teacher must be certified as a Professional-Technical E&S Instructor. This involves taking Professional Technical Education Teacher Education coursework in addition to holding the Industry certifications. Instructor Certification code #6195

The Broadcast Technologies program is one of four programs in the Media Technologies group with Graphic Communications Technology, Journalism Technology, and Photographic Technology. The sequence of instruction for all four programs begins with a one semester Media Technologies Fundamentals course, suggested for sophomore level students. Advanced level courses are encouraged to offer on the job training or paid internships in industry settings.

TI 0700 IBED 1311	MEDIA TECHNOLOGIES FUNDAMENTALS Semester/Trimester	Prerequisite for all Broadcasting Courses
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This course is designed to provide the basic fundamental competencies for the Media Technologies and is to be offered as the beginning course at the sophomore level. Legal and Ethical issues, fundamental tool and equipment skills, transferable knowledge sets, employability skills, and communication skills and terminology used throughout the industry will be developed in this offering.

TI 1701 IBED 1351	BROADCAST ASSISTANT One Year	Prerequisite: Media Technologies Fundamentals
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A course designed to introduce students to the basic concepts of the broadcast technology field.

TI 1702 IBED 1352	STUDIO ASSISTANT One Year	Prerequisite: Broadcast Assistant
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A course designed to cover the technical aspects of the broadcast field. (Audio and video equipment usage)

TI 1703 IBED 1353	BROADCAST TECHNICIAN One Year	Prerequisite: Studio Assistant
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A course designed to provide students with opportunities to produce, direct, host and write programs to be aired on commercial and public media.

TI 9807 IBED 1397	OCCUPATIONAL & CAREER EXPERIENCE – MEDIA TECHNOLOGIES Semester/Trimester
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A community or industry based work experience activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objectives of the student. The experiences must be supervised and monitored by the teacher. **(Note: This course must be approved on an individual program basis by the State Division.)**

## Public Service and Environmental Cluster

### COSMETOLOGY TECHNOLOGY

Cosmetology instruction is generally offered to provide students with the opportunity to explore the field as a career. The sequence of instruction should prepare the student to study for the state licensure examination. A total of 630 hours of instruction is required in the program. The instructor must hold a valid Cosmetology license with the appropriate certifications. Instructor Certification code #6262

TI 1501 INTRODUCTION TO COSMETOLOGY  
IBED 0651 Semester/Trimester

Prerequisite: None

This introductory course provides students with the purposes, functions and introduction to the career opportunities in the field of cosmetology. Students are given basic instruction in safety practices, general health and well being, and fashion concepts. They usually are limited to mannequins or mock preparations. The course is generally offered as a semester length course.

TI 1502 INTERMEDIATE COSMETOLOGY  
IBED 0652 One Year

Prerequisite: Introduction to Cosmetology  
or Instructor Permission

The second level course in Cosmetology provides students with opportunities to design and practice hair dressing and general practices which are performed by technicians. They are introduced to other elements of the cosmetology field of practice and work with live customers on a limited basis as supervised by the professional educator. General business and entrepreneurial practices are introduced. This course should be offered as a year long course with TI 1501 or instructor permission required for enrollment.

TI 1503 ADVANCED COSMETOLOGY  
IBED 0653 One Year – (Multi-Period Block)

Prerequisite: Intermediate Cosmetology

The advanced level cosmetology course provides students with experiences similar to the Salon environment, including live work and general business procedures. This course provides sufficient amount of time on task to allow the student to prepare for state licensure, depending on the scope of instruction provided. The course is a multi-period block of instruction for a full year. TI 1502 is required for enrollment.

TI 9815 OCCUPATIONAL & CAREER EXPERIENCE - COSMETOLOGY  
IBED 0697 Semester/Trimester

A community or industry based work experience activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objectives of the student. The experiences must be supervised and monitored by the teacher. **(Note: This course must be approved on an individual program basis by the State Division.)**

## LAW ENFORCEMENT/CRIMINAL JUSTICE

This three year program is designed to prepare students for the various occupations in law enforcement from police officer, criminal justice or probation officer, correctional officers, or auxiliary officers. Students will not be able to certify as police officers or correctional officers during the high school years but will have the necessary preparation to continue into advance level preparation at the Postsecondary institutions. Course work will cover all aspects of the occupational field, including social and psychological sciences, community, city, county, and state regulations and laws.

There are physical and personal expectations and requirements that are specific to the law enforcement field such as security, drug, legal, and ethical restrictions which all students must meet in order to enroll in the program. This program will adhere to strict enrollment regulations as determined by the local law enforcement officials who serve on the Technical Advisory Committee.

The program consists of a series of courses beginning with introductory level classes to explore the occupation. These are semester length classes, usually one period in length which may be combined with Social Science classes. Second year courses include specific content to the occupational field and are year long classes which may consist of one or two period offerings. The third year courses must be multi-period length courses which are offered for one year or a minimum of two trimesters. The teacher must be certified

as a Professional-Technical E&IS Instructor. This involves taking Professional Technical Education Teacher Education coursework in addition to holding the Industry certifications. Instructor Certification code #6282

TI 1801 INTRODUCTION TO LAW ENFORCEMENT  
IBED 2565 Semester/Two Trimesters Prerequisite: None

This course provides students with a basic understanding of the occupational choices in law enforcement. Instructional will be given in social and psychological studies, along with foundational work in general police work and criminal justice. Students will study the national, state and local laws related to the civil and criminal aspects of society.

TI 1802 INTERMEDIATE LAW ENFORCEMENT PRACTICES  
IBED 2566 One Year Prerequisite: Introduction to Law Enforcement

This course is designed to prepare students for an occupation within the Criminal Justice or Law Enforcement fields. Students will study basic criminal investigation techniques, mechanics of search, communications, emergency medical procedures, rescue and safety, traffic and crowd control and related scenarios. The course is a year in length and is offered in either a single or multiple period format.

TI 1803 ADVANCED LAW ENFORCEMENT  
IBED 2567 One Year (Multi-Period Block) Prerequisite: Intermediate Law Enforcement Practices

This multi-period year long class is designed to prepare students for entry into occupations in law enforcement, corrections, or criminal justice. While students will not be able to be certified as police, corrections or criminal justice officers, they will be given the necessary skills to perform basic tasks in the occupation as auxiliary personnel and go on for further training at a Postsecondary institution. Additional training will be provided in patrol techniques, weapons, investigations, court systems, defensive tactics, vehicle operations, fingerprinting and identification systems, and accident and criminal action prevention/investigation.

TI 9818 OCCUPATIONAL AND CAREER EXPERIENCE - LAW ENFORCEMENT/CRIMINAL JUSTICE  
IBED 2568 Semester/Trimester

A community or industry based work experience activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objectives of the student. The experiences must be supervised and monitored by the teacher. **(Note: This course must be approved on an individual program basis by the State Division.)**

## ENVIRONMENTAL SCIENCE TECHNOLOGY

Environmental Science Technology is a new program offering designed to prepare students with skills for employment in the environmental technology field. Students will be given a variety of skill development situations in which they will be required to solve problems relating to water, ground and air contaminations or abnormalities. A strong science background is suggested prior to enrollment in this program. Instrument and tool calibration exercises will be provided, along with instruction on the proper use and care of sensitive measurement devices. Extensive on-site industry and field experiences will be scheduled. Instruction also includes communication, leadership, human relations, employability, and safe and efficient work practices. The teacher must be certified as a Professional-Technical E&IS Instructor. This involves taking Professional Technical Education Teacher Education coursework in addition to holding the Industry certifications. Instructor Certification code #6145

TI 1901 INTRODUCTION TO ENVIRONMENTAL SCIENCE TECHNOLOGY  
IBED 0185 Semester/Trimester Prerequisite: None

A program designed to provide students with team work, critical thinking, problem solving, diagnostics and creative designing to industry standards. Basic instrument and tool use will be provided, along with computer/instrumentation applications and applied physical and chemical science laboratory exercises.

TI 1902 ENVIRONMENTAL SCIENCE TECHNOLOGY APPLICATIONS

- IBED 0186** Two Semesters/3 Trimesters/Year Prerequisite: Intro to Environmental Science Technology
- This course is offered for a full year and introduces students to the multitude of scenarios of hazardous material conditions which exist in the nation's waterways, soil, and air. Air and water pollution examples will be studied and models of controlling pollution or contamination will be examined.
- TI 1903** ADVANCED ENVIRONMENTAL APPLICATIONS/INTERNSHIPS  
**IBED 0187** Two Period Block Year Prerequisite: Environmental Science Technology Applications
- Students will involved in examining and studying existing pollution and contamination solutions in area industries. Single family, community, and industry applications of models to prevent contamination and pollution of soil, water, and air will be presented to students. On-site industry and field experiences will be an integral component of the third level of this program. Paid/non paid industry internships will be offered, as available. Instruction also includes communication, leadership, human relations, employability, and safe and efficient work practices. This course is offered as a multiple period block of instruction for a full year.
- TI 9819** OCCUPATIONAL & CAREER EXPERIENCE - ENVIRONMENTAL SCIENCE TECHNOLOGY  
**IBED 0197** Semester/Trimester
- A community or industry based work experience activity organized and planned to develop advanced skills necessary to gain and maintain employment. This course may encompass a broad range of paid/unpaid work experiences related to the career objectives of the student. The experiences must be supervised and monitored by the teacher. **(Note: This course must be approved on an individual program basis by the State Division.)**
- TI 9900** COOPERATIVE EDUCATION  
**IBED 0198** Semester/Trimester
- Community and industry based instruction organized and planned to provide specialized skills unique to an occupation or industry. Students are placed in businesses which provide paid on-the-job experience which is related to the student's primary area of study. The experience must be supervised by the teacher and students must have a training plan.